DOCUMENT RESUME

ED 074 962 HE 003 940

TITLE	Federal Funds for Research Development and Other Scientific Activities. Fiscal Years 1971, 1972, and 1973. Vol. 21.
INSTITUTION	National Science Foundation, Washington, D.C.
REPORT NO	NFS-72-317
PUB DATE	Aug 72
NOTE	216p.
AVAILABLE FROM	Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 ($2.75)
EDRS PRICE	MF-$0.65 HC-$9.87
DESCRIPTORS	Educational Finance; *Educational Research; *Federal Aid; *Financial Support; *Higher Education; *Research and Development Centers

ABSTRACT

This report provides comprehensive statistical information on the size and scope of federal funding for research and development and the types of institutions and purposes to which such funds are directed. Some of the highlights of the report include: (1) an upward trend since 1970 in federal R&D support is indicated in the 1973 budget; (2) the 1973 basic research obligations are expected to total $2.6 billion, and applied research obligations are estimated at $4.7 billion-record highs for both categories; (3) in 1973 approximately 74% of the federal R&D total is expected to be directed to extramural performers; (4) the share for industry, the principal R&D performer, will have declined from a high of 66% in 1963 to 52% in 1973; and (5) universities and colleges are expected to represent 12% of the federal R&D total in 1973, as compared with 7% in 1963. (Author/HS)

FILMED FROM BEST AVAILABLE COPY

Related Publications

Title	NSF No.	Price
Science Resources Studies Highlights, "Federal Support to Universities and Colleges Reaches $3.5 Billion in FY 1971"	72-316	- - - - -
Resources for Scientific Activities at Universities and Colleges, 1971	72-315	In Press
An Analysis of Federal R&D Funding by Function, 1963-73	72-313	In Press
Research and Development in Industry, 1970	72-309	$1.00
National Patterns of R&D Resources. Funds and Manpower in the United States, 1953-72	72-300	$0.50
Federal Funds for Research, Development, and Other Scientific Activities, Fiscal Years 1970, 1971, and 1972, Vol. XX	71-35	$2.00
Scientific Activities of Independent Nonprofit Institutions, 1970	71-9	$0.70

Availability of Publications

Those publications marked with a price should be obtained directly from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Where no price is listed, single copies may be obtained gratis from the National Science Foundation. Washington, D.C. 20550

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

(See inside of back cover for Other Science Resources Publications.)

ED 074962

federal funds for research development and other scientific activities

FISCAL YEARS 1971, 1972, and 1973

SURVEYS OF SCIENCE
RESOURCES SERIES

NATIONAL SCIENCE FOUNDATION

NSF 72-317

VOLUME XXI

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington, D.C. 20402 - Price $2.75
Stock Number 3800-00129

FOREWORD

This report is the 21st in an annual series that provides comprehensive statistical information on the size and scope of Federal funding for research and development and the types of institutions and purposes to which such funds are directed. It is intended to be used by makers of science policy in and out of government, by those who study scientific trends, and by all others interested in the role of science in the Nation.

The Foundation appreciates the cooperation of the participating Federal agencies and their staffs who made special efforts to meet the survey requirements. The report was prepared under the overall guidance of Thomas J. Mills, Director, Division of Science Resources Studies, and the special supervision of Kenneth Sanow, Head, Statistical Surveys and Reports Section.

H. Guyford Stever
Director
National Science Foundation

August 1972

acknowledgments

This report was prepared in the Division of Science Resources Studies under the direction of Benjamin Olsen, Study Director, Government Studies Group. Major responsibility for interpreting the data and for organization and writing of the report was taken by Jane Pugh, Suzanne Sale, and Eleanor Stoddard. Dorothy Knott prepared the statistical material.

notes

In all tables and charts of this report, details may not add to totals because of rounding. Percentages appearing in the text were calculated on the basis of thousands of dollars and may differ from percentages based on figures rounded to millions of dollars.

CONTENTS

Highlights vii
Introduction ix
Part I. Federal Funds for Research, Development, and R&D Plant x

Section

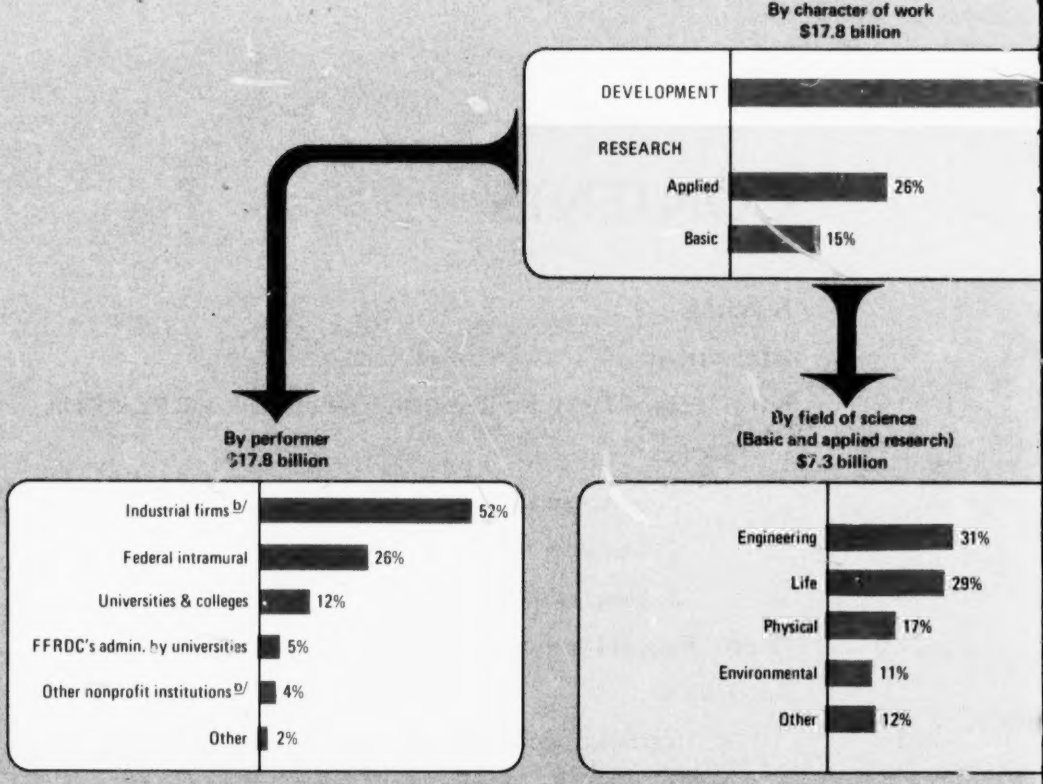
1. Levels and Trends 1
2. Character of Work 10
3. Geographic Distribution 22

Part II. Federal Funds for Scientific and Technical Information 33

Appendixes

A. Technical Notes 39
B. Federally Funded Research and Development Centers 46
C. Statistical Tables, Part I 48
D. Statistical Tables, Part II 193

Distribution of Federal obligations for research and devel

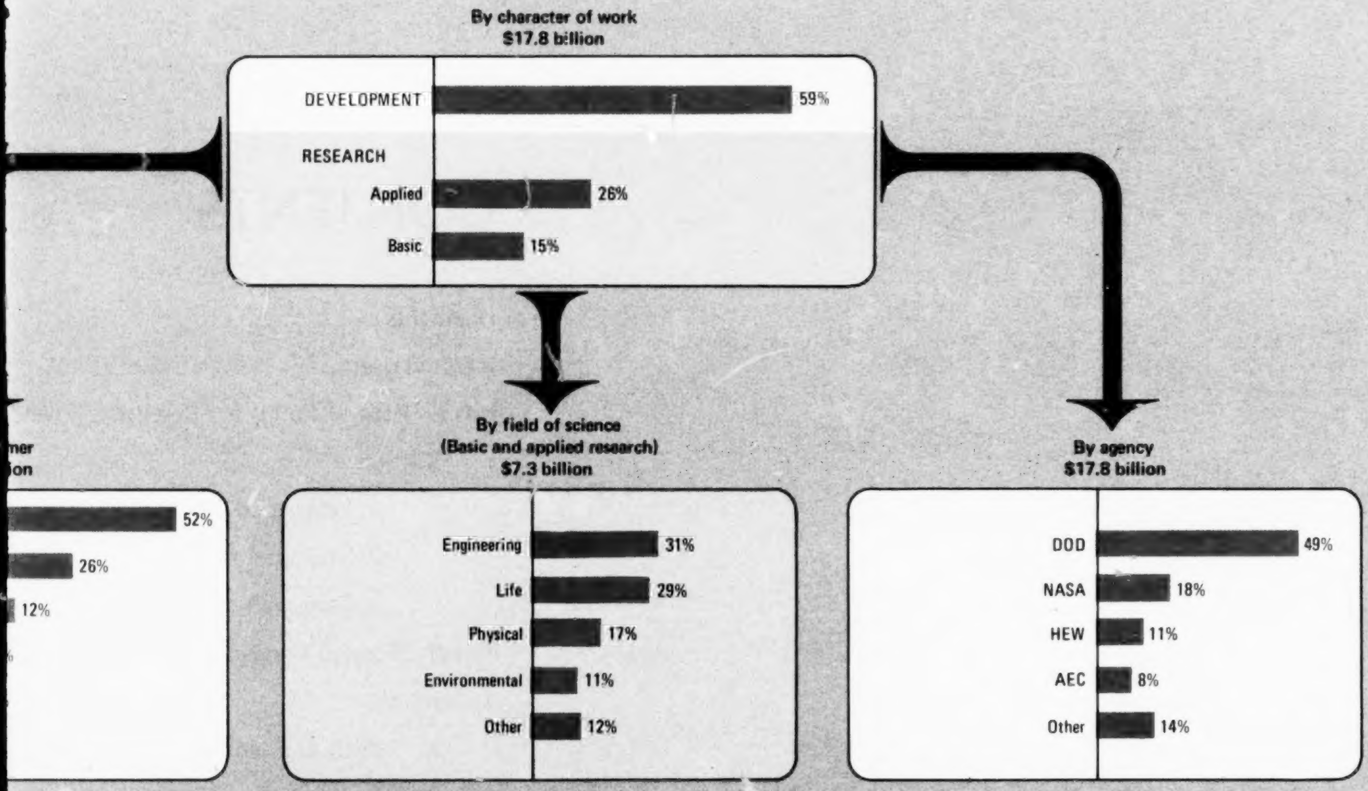


a/ Excludes R&D plant.

b/ Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

SOURCE: National Science Foundation

Distribution of Federal obligations for research and development,[a] FY 1973 (est)



d Development
s sector.

HIGHLIGH

- An upward trend since 1970 in Federal R&D support is indicated in the 1973 budget. The Federal R&D obligation total (plant excluded) is expected to rise from $15.5 billion in fiscal year 1971 to an estimated $16.8 billion in fiscal year 1972 and to an all-time high of $17.8 billion in fiscal year 1973 (p. 1).

- These figures represent rises of 8 percent and 6 percent in 1972 and 1973, respectively, and even in constant dollars, an increase of 4 percent in 1972. Although a price deflator is not yet available for 1973, an increase will also probably be shown in constant dollars for that year (p. 1).

- In 1973 basic research obligations are expected to total $2.6 billion, and applied research obligations are estimated at $4.7 billion--record highs for both these categories. Development support is expected to total $10.5 billion, still below the previous (1967) high (p. 2).

- Of the $970 million increase in R&D obligations scheduled for 1973, DOD accounts for $400 million and NASA and AEC are each budgeted for increases of $67 million. These three agencies make up more than one-half of the 1973 growth (pp. 4 and 5).

- In 1973 R&D progran
expected to increase
with HEW the princi
lowed by NSF ($75 n
million) (pp. 4 and 5).

- In 1973 approximatel
lion) is expected to b
($4.6 billion) will supp

- The share for industr
from a high of 66 p
FFRDC's) (p. 8).

- Universities and colleg
eral R&D total ($2.1
lion) in 1963 (pp. 7 an

- California, the leading
percent of the Federal

- Maryland supplanted
R&D funds in 1971;
New Jersey, Missouri,
(p. 23).

HIGHLIGHTS

Federal R&D support is indicated in the D obligation total (plant excluded) is ex- n in fiscal year 1971 to an estimated $16.8 o an all-time high of $17.8 billion in fiscal

8 percent and 6 percent in 1972 and 1973, tant dollars, an increase of 4 percent in is not yet available for 1973, an increase onstant dollars for that year (p. 1).

ns are expected to total $2.6 billion, and estimated at $4.7 billion--record highs for ment support is expected to total $10.5 1967) high (p. 2).

in R&D obligations scheduled for 1973, n and NASA and AEC are each budgeted ese three agencies make up more than one- nd 5).

- In 1973 R&D programs of agencies other than DOD, NASA and AEC are expected to increase their aggregate R&D obligations by $436 million, with HEW the principal contributor, accounting for $194 million, followed by NSF ($75 million), Commerce ($55 million), and Interior ($32 million) (pp. 4 and 5).
- In 1973 approximately 74 percent of the Federal R&D total ($13.2 billion) is expected to be directed to extramural performers; the remainder ($4.6 billion) will support work by Federal personnel (p. 8).
- The share for industry, the principal R&D performer, will have declined from a high of 66 percent in 1963 to 52 percent in 1973 (including FFRDC's) (p. 8).
- Universities and colleges are expected to represent 12 percent of the Federal R&D total ($2.1 billion) in 1973, compared with 7 percent ($0.9 billion) in 1963 (pp. 7 and 8).
- California, the leading R&D support State, dropped in its share from 35 percent of the Federal R&D total in 1963 to 22 percent in 1971 (p.23).
- Maryland supplanted New York as the second largest recipient of Federal R&D funds in 1971; New York was followed by Florida, Massachusetts, New Jersey, Missouri, Texas, Washington, and Pennsylvania, in that order (p. 23).

FEDERAL AGENCY ACRONYMS USED THROUGHOUT THIS REPORT

AEC — Atomic Energy Commission
AID — Agency for International Development
DOD — Department of Defense
DOT — Department of Transportation
EPA — Environmental Protection Agency
HEW — Department of Health, Education, and Welfare
HUD — Department of Housing and Urban Development
NASA — National Aeronautics and Space Administration

NBS — National Burea
NIH — National Institu
NOAA — National Ocean
NSF — National Scienc
OEO — Office of Econo
USDA — U.S. Departmer
VA — Veterans Admi

RT

ion
Development

ation
n Agency
ducation, and Welfare
nd Urban Development
Space Administration

NBS — National Bureau of Standards
NIH — National Institutes of Health
NOAA — National Oceanic and Atmospheric Administration
NSF — National Science Foundation
OEO — Office of Economic Opportunity
USDA — U.S. Department of Agriculture
VA — Veterans Administration

INTRODUCTION

A function of the National Science Foundation is to provide information on scientific resources. The *Federal Funds* series is directed to the specific areas of Federal support of research and development and scientific and technical information activities. This series began with fiscal year 1952 and has continued without interruption since that time, widening its scope as needs for new data elements became apparent.

This issue of *Federal Funds for Research, Development, and Other Scientific Activities* provides data on the R&D programs of 87 Federal agencies and agency subdivisions, in terms of both expenditures and obligations for agency R&D totals and in terms of obligations for more detailed classes. This detail covers character of work supported: basic research, applied research, and development; performers of research and development: Federal intramural, industrial firms, universities and colleges, other nonprofit institutions, and others; and research support by fields of science. Obligational data are also provided for Federal R&D support in all the States, and scientific and technical information activities are reported in obligations by agency.

The data appearing here are comparable to those included in "Special Analysis R, Federal Research and Development Programs" in *The Budget of the United States Government, Fiscal Year 1973.* The same definitions for research and development and R&D plant are used in both reports, although differences do exist since data in this report are based on later information. In addition, this report provides detail not shown in the Special Analysis (basic research, applied research, performers supported, fields of science, and geographic distribution).

These data were received from Federal agencies during the period March through May 1972 in response to a questionnaire formulated and distributed by the Foundation in December 1971. The Foundation staff assisted agency respondents in the interpretation of the survey's concepts and definitions and evaluated the responses for clarity and consistency, but the classification of activities and amounts to be report
themselves.

Following the format of Federal budgets
are reported in 3-year cycles. Amounts fo
flect transactions of a completed fiscal yea
1972 and 1973 are estimates and are subjec
ministrative changes instituted after the
and the agency reporting to the National
after. Data for 1973, moreover, are based
programs and do not reflect subsequent
allocation decisions.

Most data reported on R&D activities d
A number of R&D programs are not identi
many of them, of course, are so identifie
ords do not classify agency R&D activiti
search, applied research, and developme
hold true for fields of science supported.
however, is the fact that agencies have par
sive annual surveys and have developed a
to meet the survey demands with increasin
grown.

The Foundation encourages respondents
whenever necessary to improve accuracy.
incorporated into the historical data to m
bility of the statistical series as shown in the

This report provides a broad picture of
funds to major areas of effort. Although it
the perspective of total-agency coverage a
ments of the Federal R&D involvement ove

INTRODUCTION

nce Foundation is to provide information
al Funds series is directed to the specific
rch and development and scientific and
is series began with fiscal year 1952 and
n since that time, widening its scope as
e apparent.

Research, Development, and Other Scien-
e R&D programs of 87 Federal agencies
of both expenditures and obligations for
obligations for more detailed classes. This
ported: basic research, applied research,
esearch and development: Federal intra-
and colleges, other nonprofit institutions,
y fields of science. Obligational data are
pport in all the States, and scientific and
reported in obligations by agency.

mparable to those included in "Special
Development Programs" in *The Budget of*
scal Year 1973. The same definitions for
D plant are used in both reports, although
his report are based on later information.
etail not shown in the Special Analysis
rformers supported, fields of science, and

Federal agencies during the period March
questionnaire formulated and distributed
71. The Foundation staff assisted agency
of the survey's concepts and definitions
arity and consistency, but the classification of activities and amounts to be reported were made by the respondents themselves.

Following the format of Federal budgets, data in the *Federal Funds* report are reported in 3-year cycles. Amounts for 1971 (and all previous years) reflect transactions of a completed fiscal year and, thus, are "actual." Data for 1972 and 1973 are estimates and are subject to reprogramming and other administrative changes instituted after the publication of *The Budget, 1973* and the agency reporting to the National Science Foundation shortly thereafter. Data for 1973, moreover, are based on agency proposals to undertake programs and do not reflect subsequent appropriation, apportionment, or allocation decisions.

Most data reported on R&D activities do not reflect accounting precision. A number of R&D programs are not identified as budget line items, although many of them, of course, are so identified. Furthermore, most agency records do not classify agency R&D activities into the categories of basic research, applied research, and development, specifically. The same would hold true for fields of science supported. Compensating for this situation, however, is the fact that agencies have participated in as many as 21 successive annual surveys and have developed a rationale for using their records to meet the survey demands with increasing exactness as their familiarity has grown.

The Foundation encourages respondents to revise their reporting practices whenever necessary to improve accuracy. Such agency revisions are then incorporated into the historical data to maintain consistency and comparability of the statistical series as shown in the appendix tables.

This report provides a broad picture of the distribution of Federal R&D funds to major areas of effort. Although it is limited by its breadth, it offers the perspective of total-agency coverage and a consistent series of measurements of the Federal R&D involvement over time.

Part I

FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT

Section 1. LEVELS AND TRENDS

RESEARCH AND DEVELOPMENT

- An upward trend since 1970 in Federal R&D support is now clearly established. The increase from $15.5 billion in 1971 to an estimated $16.8 billion in 1972 was expected to move the Federal R&D obligation total to a record high. The R&D total of $17.8 billion requested in the President's 1973 budget marks still another high.
- These figures represent rises of 8 percent in 1972 and 6 percent in 1973 and even in constant dollars, a rise of 4 percent in 1972. Although a price deflator is not available for 1973, a further increase in constant dollars is probable.[1]
- In 1972 Federal R&D obligations in constant dollars are 18 percent below the 1967 high of $16.5 billion, and are virtually at the same level as 1963.
- In the current (1971-73) period basic research reflects the largest relative increases, with an average annual growth rate of almost 11 percent. The comparable rates for applied research and development are 8 percent and 6 percent, respectively.

---

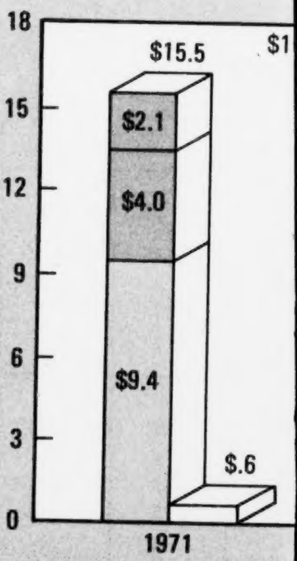
[1] In the absence of a reliable R&D cost index, the gross national product (GNP) implicit price deflator was used to convert R&D obligations to constant dollars. The GNP deflator includes the effects of the price changes of all goods and services in the economy and therefore can only indicate approximate changes in costs of inputs specifically related to R&D performance.

R&D PLANT

- Federal R&D plant obligation
1971 to $0.7 billion in 1972
well below the $1.1 billion lev
buildup was at its peak.
- AEC is the major supporter o
drop substantially, from 51 pe
estimated 34 percent in 1973.
agencies are scheduled to rise i
DOD, NASA, HEW, DOT, and

Federal obligations for re

(Billions of dollars)



SOURCE: National Science F

S AND TRENDS

LOPMENT

0 in Federal R&D support is now clearly m $15.5 billion in 1971 to an estimated pected to move the Federal R&D obligation R&D total of $17.8 billion requested in the s still another high.

of 8 percent in 1972 and 6 percent in 1973 a rise of 4 percent in 1972. Although a price 1973, a further increase in constant dollars

ons in constant dollars are 18 percent below , and are virtually at the same level as 1963.

od basic research reflects the largest relative nual growth rate of almost 11 percent. The esearch and development are 8 percent and

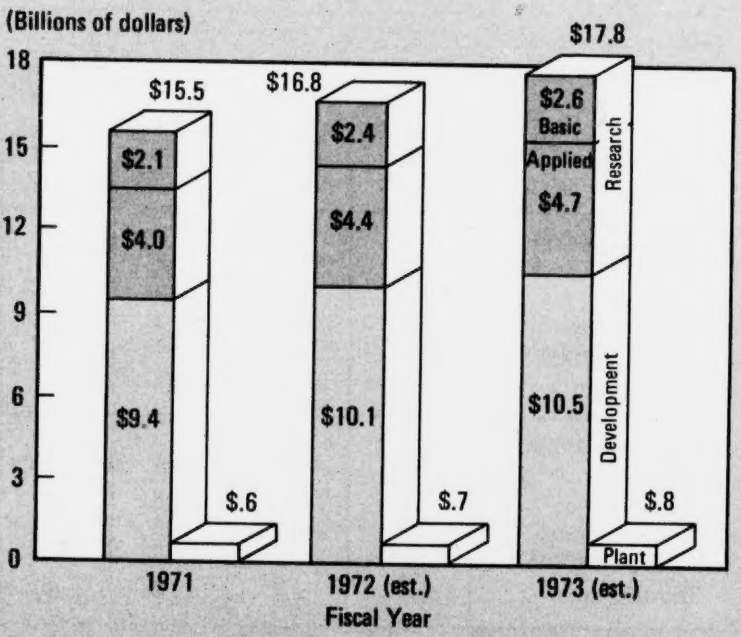
---

t index, the gross national product (GNP) implicit price ions to constant dollars. The GNP deflator includes the d services in the economy and therefore can only indicate fically related to R&D performance.

R&D PLANT

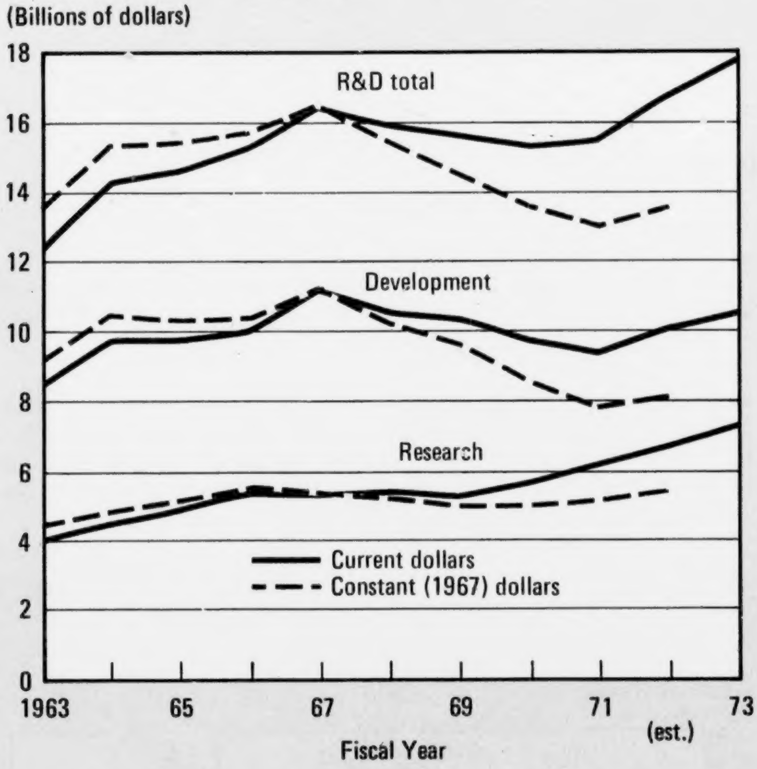
- Federal R&D plant obligations are expected to rise from $0.6 billion in 1971 to $0.7 billion in 1972 and to $0.8 billion in 1973. They are still well below the $1.1 billion level of 1963 through 1965 when the NASA buildup was at its peak.
- AEC is the major supporter of R&D plant, but its share is expected to drop substantially, from 51 percent of the Federal total in 1971 to an estimated 34 percent in 1973. R&D plant programs of a number of other agencies are scheduled to rise in the 1971-73 period, in particular those of DOD, NASA, HEW, DOT, and EPA.

Federal obligations for research, development, and R&D plant



SOURCE: National Science Foundation

Trends in Federal R&D obligations



Average Annual Percent Change

Character of work	1963-67	1967-71	1971-72	1972-73
Current dollars				
R&D total	7.2	−1.5	8.2	5.8
Research	6.9	3.9	9.7	8.1
Basic research	9.8	1.4	12.3	8.7
Applied research	5.3	5.4	8.4	7.8
Development	7.4	−4.4	7.2	4.2
Constant dollars[a]				
R&D total	5.0	−5.9	4.3	(b)
Research	4.7	− .7	5.8	(b)
Basic research	7.5	−3.1	8.3	(b)
Applied research	3.1	.7	4.5	(b)
Development	5.2	−8.7	3.3	(b)

[a] Based on the GNP implicit price deflator.

[b] Not available.

SOURCE: National Science Foundation

CHARACTER OF WORK

- Within the R&D spectrum research trast to development during the accounts for most of the dollar incr of growth for basic research is somev

- In current or constant dollars th expected to reach a new high in 19 in 1973.

- Basic research is scheduled to reach in 1972 and $2.6 billion in 1973. H total is below 1967 and approximate

- Applied research is the sole chara important increase in real terms bet stant dollars is 7 percent in this peri in 1973 is an all-time high.

- The development total at an estima below the high of $11.3 billion in figure becomes one of the lowest in below 1967.

e

1971-72	1972-73
8.2	5.8
9.7	8.1
12.3	8.7
8.4	7.8
7.2	4.2
4.3	(b)
5.8	(b)
8.3	(b)
4.5	(b)
3.3	(b)

CHARACTER OF WORK

- Within the R&D spectrum research shows a strong upward trend in contrast to development during the 1963-73 decade. Applied research accounts for most of the dollar increase although the average annual rate of growth for basic research is somewhat higher.

- In current or constant dollars the overall Federal research effort is expected to reach a new high in 1972 and another high in current dollars in 1973.

- Basic research is scheduled to reach successive record levels of $2.4 billion in 1972 and $2.6 billion in 1973. However, in constant dollars the 1972 total is below 1967 and approximately the same as 1969.

- Applied research is the sole character-of-work component to show an important increase in real terms between 1967 and 1972. The rise in constant dollars is 7 percent in this period. The scheduled total of $4.7 billion in 1973 is an all-time high.

- The development total at an estimated $10.5 billion for 1973 is 7 percent below the high of $11.3 billion in 1967. In constant dollars the 1973 figure becomes one of the lowest in the 1963-73 decade and is 28 percent below 1967.

Federal obligations and expenditures, fiscal years 1940-73

[Dollars in millions]

Fiscal year	Total budget outlays[b]	Research, development, and R&D plant[a] Obligations	Research, development, and R&D plant[a] Expenditures	Research, development, and R&D plant[a] Expenditures as percent of total budget outlays
1940	$ 9,589	(c)	$ 74	0.8
1941	13,980	(c)	198	1.4
1942	34,500	(c)	280	.8
1943	78,909	(c)	602	.8
1944	93,956	(c)	1,377	1.5
1945	95,184	(c)	1,591	1.7
1946	61,738	(c)	918	1.5
1947	36,931	$ 691	900	2.4
1948	36,493	868	855	2.3
1949	40,570	1,105	1,082	2.7
1950	43,147	1,175	1,083	2.5
1951	45,797	1,812	1,301	2.8
1952	67,962	2,195	1,816	2.7
1953	76,769	3,361	3,101	4.0
1954	70,890	3,039	3,148	4.4
1955	68,509	2,745	3,308	4.8
1956	70,460	3,267	3,446	4.9
1957	76,741	4,389	4,462	5.8
1958	82,575	4,906	4,991	6.0
1959	92,104	7,123	5,806	6.3
1960	92,223	8,080	7,744	8.4
1961	97,795	9,607	9,287	9.5
1962	106,813	11,069	10,387	9.7
1963	111,311	13,663	12,012	10.8
1964	118,584	15,324	14,707	12.4
1965	118,430	15,746	14,889	12.6
1966	134,652	16,179	16,018	11.9
1967	158,254	17,149	16,859	10.7
1968	178,833	16,525	17,049	9.5
1969	184,548	16,306	16,348	8.9
1970	196,588	15,854	15,736	8.0
1971	211,425	16,161	15,992	7.6
1972 (est.)[d]	236,610	17,485	16,734	7.1
1973 (est.)[d]	246,257	18,627	17,327	[e]7.0

[a] Beginning in fiscal year 1953 amounts for both obligations and expenditures include pay and allowance of military personnel in research and development.

[b] "Outlays" include expenditures plus net lending. Data through fiscal year 1953 are in terms of the "Consolidated Cash Statement" and data beginning with fiscal year 1954 are in terms of the "Unified Budget." For purposes of providing trend information the data are considered to be reported on a generally comparable basis.

[c] Not available.

[d] These estimates are based on amounts shown in *The Budget, 1973* and do not reflect congressional appropriations or changes made by executive action subsequent to budget submission at the mid-point of fiscal 1972.

[e] The ratio of 7.0 percent shown as the R&D portion of the Federal budget in 1973 is based on the total budget outlay figure of $246 billion, just as all the ratios in the table above are based on total budget outlays. In another National Science Foundation report, An Analysis of Federal R&D Funding by Function, 1963-73, the ratios of the R&D portion of the budget to the overall budget for the years 1963-73 differ in most cases from the ratios shown above. Budget totals in the function report represent the sum of operating functions of the budget ($227 billion in 1973), under which all R&D activities are subsumed. Such items as interest, general revenue sharing, and special allowances do not encompass R&D activities and were, therefore, omitted in the calculation of ratios. In addition, the expenditure column in the table above includes R&D and R&D plant whereas in the function report R&D plant expenditures are omitted.

SOURCES: Office of Management and Budget and Bureau of the Budget, *The Budget of the United States Government*, fiscal years 1940 through 1973; National Science Foundation, annual surveys of R&D programs of Federal agencies.

RELATIONSHIP TO BROADER TOTALS

- Federal R&D and R&D plant expenditures as a share of total budget outlays have declined from a high of 12.6 percent in 1965 to an estimated 7.0 percent in 1973, the lowest ratio since 1959.[2]

- In some years (1966 through 1968, for example) R&D and R&D plant expenditure totals were increasing even while the ratio to total budget fell because other Federal programs were growing faster. At present R&D programs are growing at about the same rate as other Federal programs taken as a whole.

- As a share of the gross national product, expenditures for Federal R&D and R&D plant programs have ranged between 1.5 percent and 2.4 percent in the 1963-72 period. The high was realized in 1964, and since then the decrease has been continuous to the 1.5 percent level shown in 1972.

- In 1972 Federal agencies are expected to provide 54 percent of all national R&D funds, with support supplied by industry estimated at 40 percent. The largest Federal support share was recorded in 1964 at more than 65 percent of the national total.

- Industry is the major R&D *performer*, accounting for 69 percent of total national performance in 1972, compared with a Federal performance share of 14 percent.

- In the 1963-72 period the national R&D total has risen steadily even in years when Federal R&D support declined.

---

[2] Budget totals are given in terms of outlays rather than obligations, hence the R&D totals that are used for share computations must be in terms of expenditures rather than obligations. The only difference between outlays and expenditures is that outlays include net lending.

Trends

SOURC

Relati tures

Fiscal
196
196
196
196
196
196
196
197
197
197

NOTE
rather tha
R&D plan
SOUR
Current B

RELATIONSHIP TO BROADER TOTALS

- Federal R&D and R&D plant expenditures as a share of total budget outlays have declined from a high of 12.6 percent in 1965 to an estimated 7.0 percent in 1973, the lowest ratio since 1959.[2]

- In some years (1966 through 1968, for example) R&D and R&D plant expenditure totals were increasing even while the ratio to total budget fell because other Federal programs were growing faster. At present R&D programs are growing at about the same rate as other Federal programs taken as a whole.

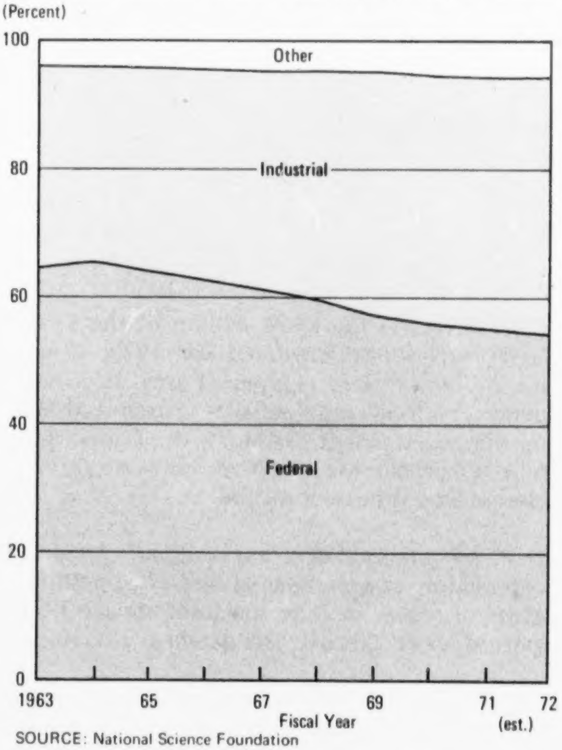
- As a share of the gross national product, expenditures for Federal R&D and R&D plant programs have ranged between 1.5 percent and 2.4 percent in the 1963-72 period. The high was realized in 1964, and since then the decrease has been continuous to the 1.5 percent level shown in 1972.

- In 1972 Federal agencies are expected to provide 54 percent of all national R&D funds, with support supplied by industry estimated at 40 percent. The largest Federal support share was recorded in 1964 at more than 65 percent of the national total.

- Industry is the major R&D *performer*, accounting for 69 percent of total national performance in 1972, compared with a Federal performance share of 14 percent.

- In the 1963-72 period the national R&D total has risen steadily even in years when Federal R&D support declined.

Trends in national R&D funding by major source



SOURCE: National Science Foundation

Relationship of Federal R&D and R&D plant expenditures to gross national product, fiscal years 1963-72

[Dollars in millions]

Fiscal year	Gross national product	Federal R&D and R&D plant expenditures	Ratio of Federal R&D and R&D plant expenditures to GNP
1963 . .	$ 574,500	$12,012	2.09
1964 . .	611.600	14,707	2.40
1965 . .	655,600	14,889	2.27
1966 . .	718,500	16,018	2.23
1967 . .	771,400	16,859	2.19
1968 . .	827,000	17,049	2.06
1969 . .	898,400	16,348	1.82
1970 . .	953,200	15,736	1.65
1971 . .	1,008,200(est.)	15,992	1,59
1972 . .	1,092,200(est.)	16,734(est.)	1.53

NOTE: Gross national product totals are given on the basis of the fiscal year rather than the calendar year so as to achieve comparability with Federal R&D and R&D plant expenditure totals.

SOURCES: Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business;* National Science Foundation.

---

[2] Budget totals are given in terms of outlays rather than obligations, hence the R&D totals that are used for share computations must be in terms of expenditures rather than obligations. The only difference between outlays and expenditures is that outlays include net lending.

AGENCIES

Current Programs

- DOD accounts for $400 million of the $970 million increase in Federal R&D obligations scheduled for 1973. Chief expansion is found in the missiles and related equipment area. It covers such programs as the Navy underseas long-range missile system (ULMS), the Army surface-to-air missile development (SAM-D), the Project Hardsite prototype system for Minuteman defense, the Navy Harpoon antiship missile, and the Air Force Hound Dog II nuclear missile.

  DOD reflects a net decrease in aircraft programs in 1973 owing to the near completion of a number of aircraft development projects. However, program increases include the joint service heavy lift helicopter; the Navy vertical/short takeoff and landing aircraft; and several Air Force craft.

  Other important R&D programs of DOD include the airborne warning and control system (AWACS), electronic countermeasures, tactical sensor systems, and undersea surveillance systems. A major effort covers surface effect ship prototypes and an advanced attack submarine. A new prototype main battle tank will be developed in 1973, and work will proceed on the Army mechanized infantry combat vehicle (MICV) and the armored reconnaissance scout vehicle (ATCV).

- NASA funding shows a rise in 1973 for the first time since 1966. This rise is only $67 million, or 2 percent more than the 1972 NASA total. Manned space flight, the chief component of NASA programs, shows a slight drop, resulting from the fact that completion of the Apollo programs is not quite offset by planned increases for the space shuttle.

  Largest 1973 increase is in space science and applications, covering work on exploration of the planets and the high-energy astronomy observatory. The first Earth Resources Technology Satellite, a Synchronous Meteorological Satellite, and a new Applications Test Satellite (ATS-F) represent the chief applications efforts.

  Aeronautical technology is also scheduled for an increase, much of it for development of a short takeoff and landing (STOL) aircraft to be used in short haul transportation systems.

- HEW is scheduled for a $194 million in
tutes of Health are responsible for m
HEW growth. Among the 10 institute
cancer institute, next is in the heart a
child health and human development ins

  The Health Services and Mental Health
attention in 1973 on drug abuse,
minority mental health, and crime and d

  In 1973 a major portion of the R&D w
be assumed by the newly created Natio
R&D programs combined with those
one-fourth of HEW's planned increase.

  R&D programs of the Food and Dru
grow importantly in 1973 to cover
evaluation, and product safety, includin

Federal obligations for research and

[Dollars in milli

Agency	Ac 19
Total	$15
Department of Defense	7
National Aeronautics and Space Administration	3
Department of Health, Education, and Welfare	1
Atomic Energy Commission	1
National Science Foundation	
Department of Transportation	
Department of Agriculture	
Department of the Interior	
Department of Commerce	
Environmental Protection Agency	
Office of Economic Opportunity	
Other agencies	

$970 million increase in Federal
Chief expansion is found in the
overs such programs as the Navy
JLMS), the Army surface-to-air
t Hardsite prototype system for
ntiship missile, and the Air Force

ograms in 1973 owing to the near
lopment projects. However, pro-
heavy lift helicopter; the Navy
aft; and several Air Force craft.

include the airborne warning and
ountermeasures, tactical sensor
ns. A major effort covers surface
attack submarine. A new proto-
in 1973, and work will proceed
ombat vehicle (MICV) and the
TCV).

r the first time since 1966. This
more than the 1972 NASA total.
ent of NASA programs, shows a
completion of the Apollo pro-
increases for the space shuttle.

and applications, covering work
h-energy astronomy observatory.
atellite, a Synchronous Meteoro-
Test Satellite (ATS-F) represent

d for an increase, much of it for
ing (STOL) aircraft to be used in

- HEW is scheduled for a $194 million increase in 1973. The National Institutes of Health are responsible for more than one-half of the planned HEW growth. Among the 10 institutes, the greatest growth is in the cancer institute, next is in the heart and lung institute, followed by the child health and human development institute.

  The Health Services and Mental Health Administration will focus growing attention in 1973 on drug abuse, alcoholism, child mental health, minority mental health, and crime and delinquency.

  In 1973 a major portion of the R&D work of the Office of Education will be assumed by the newly created National Institute of Education, and its R&D programs combined with those of OE will account for more than one-fourth of HEW's planned increase.

  R&D programs of the Food and Drug Administration are expected to grow importantly in 1973 to cover work on food protection, drug evaluation, and product safety, including research on radiation.

Federal obligations for research and development by agency
[Dollars in millions]

Agency	Actual 1971	Estimates 1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$15,550	$16,821	+ 8.2	$17,791	+ 5.8
Department of Defense	7,509	8,374	+11.5	8,774	+ 4.8
National Aeronautics and Space Administration	3,258	3,208	− 1.5	3,275	+ 2.1
Department of Health, Education, and Welfare	1,476	1,764	+19.5	1,957	+11.0
Atomic Energy Commission	1,303	1,308	+ .4	1,375	+ 5.1
National Science Foundation	337	451	+33.9	526	+16.5
Department of Transportation	483	365	−24.5	381	+ 4.5
Department of Agriculture	305	349	+14.3	361	+ 3.7
Department of the Interior	194	224	+15.6	256	+14.3
Department of Commerce	144	173	+20.6	228	+31.8
Environmental Protection Agency	137	176	+28.6	186	+ 5.6
Office of Economic Opportunity	152	119	−22.4	113	− 5.4
Other agencies	252	311	+23.5	360	+15.5

- AEC's 1973 R&D programs are expected to grow by $67 million. Reactor development and physical research will show greatest growth. Emphasis will be placed on the development of a liquid metal fast breeder reactor (LMFBR) and on fast breeder reactor safety; also on space electric power development and naval propulsion reactors. In physical research increases are planned primarily in the basic research area.

- NSF plans an increase of $75 million in 1973, third highest among the agencies. The largest amount is in NSF's ongoing support of basic research in all fields of science. Almost as large an amount is shown in the RANN (Research Applied to National Needs) program, focused on selected problems of national concern. The third largest growth is shown in National and Special Research Programs, covering two new ones: an experimental R&D incentives program to test incentives to stimulate non-Federal R&D investment, encourage cooperative R&D undertakings by different economic sectors, and explore new institutional arrangements; and a national R&D assessment program.

- DOT shows a slight increase in 1973 despite the termination of the SST program. If the SST were excluded from the DOT total for 1972, then an increase of $80 million would be registered. This increase covers Federal Highway Administration programs, covering improved highway design and operation; activities to reduce traffic congestion; highway and bridge structural safety programs; and research on highways and environment.

  Other increases cover traffic safety programs concerned with alcohol and driving, traffic enforcement, and motor vehicle research; efforts in railroad safety research, advanced rail systems, Metroliner improvements, and advanced passenger train development; urban mass transportation experiments and new technology transit systems. An increase is also scheduled for work on air traffic control and navigation systems and aircraft noise reduction.

- USDA R&D efforts show a moderate increase in 1973, mostly within the Agricultural Research Service and the Cooperative State Research Service. Pesticide work and insect control are currently stressed, as is work at agricultural experiment stations to promote efficient production, marketing, distribution, and utilization of farm products.

- For Interior the 1973 incr
  Bureau of Mines to convert
  mapping by the Geological
  increased work on earthqua
  natural distribution of sport
  work on low-cost methods

- Commerce represents the lar
  agencies in the 1973 budget
  Oceanic and Atmospheric A
  Standards are the principal
  up work on earthquake pred
  supporting biological researc
  change and modification and
  Shelf.

  NBS increases are scheduled
  and exploratory research on r
  abatement standards; use of c
  ic technology to power gener
  and structural failures. A ne
  private sector R&D efforts.

- EPA shows moderate growth
  funding increases provide fo
  pollution instrumentation an
  pollution, and on regional air

- The combined R&D programs
  of almost 10 percent in the 19
  the net increase would be no
  AID programs related to tech
  urban blight, improve the env
  government reporting systems
  reservoir of knowledge of ur
  tion; and VA programs in medi

cted to grow by $67 million. Reactor
will show greatest growth. Emphasis
of a liquid metal fast breeder reactor
or safety; also on space electric power
eactors. In physical research increases
earch area.

on in 1973, third highest among the
F's ongoing support of basic research
ge an amount is shown in the RANN
) program, focused on selected prob-
largest growth is shown in National
ring two new ones: an experimental
ntives to stimulate non-Federal R&D
R&D undertakings by different eco-
utional arrangements; and a national

despite the termination of the SST
rom the DOT total for 1972, then an
istered. This increase covers Federal
overing improved highway design and
ic congestion; highway and bridge
arch on highways and environment.

rograms concerned with alcohol and
or vehicle research; efforts in railroad
ms, Metroliner improvements, and
t; urban mass transportation experi-
stems. An increase is also scheduled
avigation systems and aircraft noise

increase in 1973, mostly within the
Cooperative State Research Service.
re currently stressed, as is work at
promote efficient production, mar-
farm products.

- For Interior the 1973 increase is directed to expanded efforts by the Bureau of Mines to convert coal to pipeline gas economically; increased mapping by the Geological Survey of earthquake geologic hazards and increased work on earthquake prediction; studies of factors influencing natural distribution of sport fish as well as research on fish husbandry; and work on low-cost methods of producing fresh water from saline water.

- Commerce represents the largest relative R&D gain among all the Federal agencies in the 1973 budget with its $55 million increase. The National Oceanic and Atmospheric Administration and the National Bureau of Standards are the principal contributors to this growth. NOAA will step up work on earthquake prediction and weather modification as well as supporting biological research on living marine resources, on ecological change and modification and mariculture, and mapping of the Continental Shelf.

  NBS increases are scheduled to cover work in new measurement methods and exploratory research on reference materials; development of pollution abatement standards; use of computer technology; application of cryogenic technology to power generation; and work to reduce material, product, and structural failures. A new program will explore ways to encourage private sector R&D efforts.

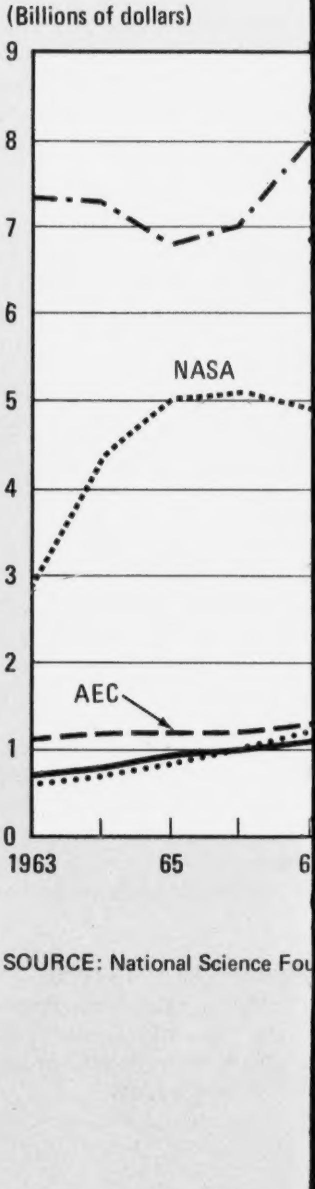
- EPA shows moderate growth in 1973 after a sharp rise in 1972. Current funding increases provide for expanded research and development on pollution instrumentation and measurement, on the health effects of air pollution, and on regional air pollution modeling.

- The combined R&D programs of the remaining agencies reflect an increase of almost 10 percent in the 1973 budget. If OEO did not show a decrease, the net increase would be noticeably larger. Chief areas of growth are in AID programs related to technical assistance; HUD programs to evaluate urban blight, improve the environment, further automate State and local government reporting systems, analyze urban growth, and help create a reservoir of knowledge of urban matters at institutions of higher education; and VA programs in medical, surgical, and prosthetic research.

Trends

- In 1970 signs of a shift were evident in the pattern of agency funding that prevailed from 1963 through 1969. For the first time the group of agencies other than DOD, NASA, AEC, and HEW reflected a higher combined R&D total than either HEW or AEC.
- In 1971, although DOD and NASA continued to dominate the Federal R&D support scene, HEW replaced AEC as the agency with the third largest R&D effort. That year DOD began an upward R&D trend that has since contributed to renewed expansion of the Federal R&D total.
- In 1972 and 1973 these trends persist. DOD funding in both years is scheduled for record highs. NASA funding is expected to level off, with a small upturn indicated for 1973. HEW's strong gains are expected to continue. AEC funding is virtually unchanged, although a slight rise is scheduled for 1973.
- In 1973 the share of DOD in the Federal R&D total is expected to be 50 percent, compared with 58 percent in 1963. NASA's share is an anticipated 19 percent in 1972, compared with 34 percent in 1965, the highest NASA share. HEW is expected to carry out 11 percent of the total in 1973, more than twice the 5-percent share of 1963. AEC will account for an estimated 8 percent of the Federal R&D effort in 1973, compared with 9 percent in 1963.
- The 31 other agencies reporting R&D programs in the current (1971-73) period show a significant rise in aggregate R&D support. In 1963 this group made up 5 percent of the Federal R&D total, but in 1973 its share is expected to be 14 percent. This change reflects growing R&D programs in new areas, many designed with a problem-centered approach.
- The greatest dollar increases in this group, 1971-73, are recorded by NSF. Agencies with the next largest increases are Commerce, Interior, USDA, and EPA, in that order.

Trends in R&D obligations
R&D programs



SOURCE: National Science Fo

ne pattern of agency funding that
or the first time the group of
and HEW reflected a higher com-
C.

tinued to dominate the Federal
C as the agency with the third
n an upward R&D trend that has
f the Federal R&D total.

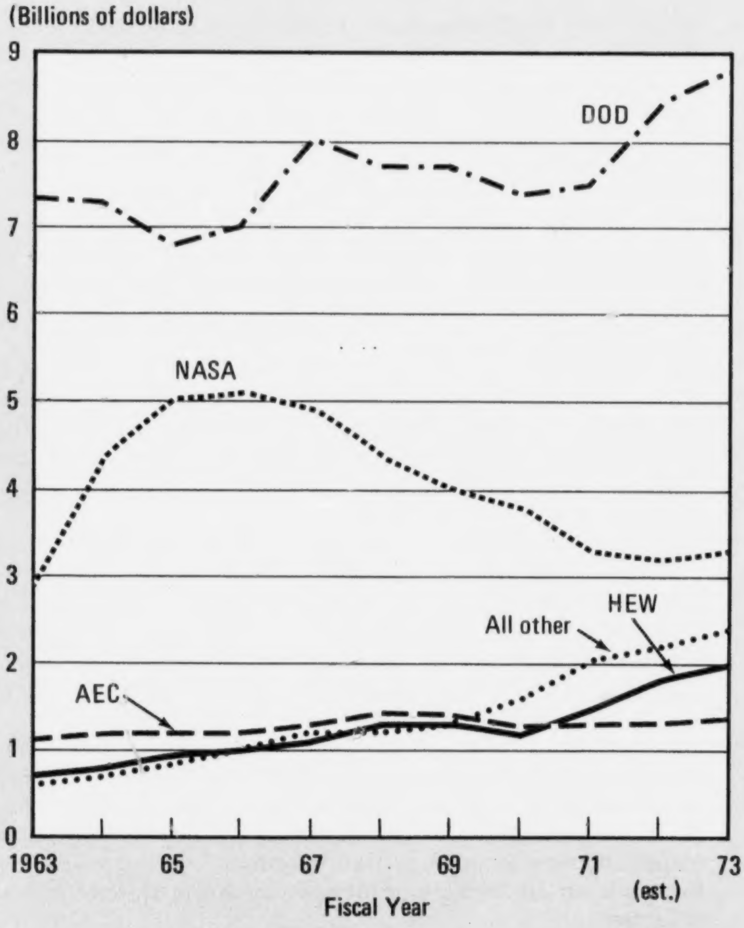
DOD funding in both years is
ng is expected to level off, with a
strong gains are expected to con-
nged, although a slight rise is

l R&D total is expected to be 50
963. NASA's share is an anticipa-
34 percent in 1965, the highest
out 11 percent of the total in
re of 1963. AEC will account for
R&D effort in 1973, compared

ograms in the current (1971-73)
ate R&D support. In 1963 this
R&D total, but in 1973 its share
ange reflects growing R&D pro-
h a problem-centered approach.

, 1971-73, are recorded by NSF.
are Commerce, Interior, USDA,

Trends in R&D obligations of Federal agencies leading in R&D programs



SOURCE: National Science Foundation

PERFORMERS

- All sectors except nonprofit institutions are scheduled to receive higher dollar support in 1973 than 1972.

- In 1971, 1972, and 1973 Federal obligations for intramural R&D performance and for university and college R&D performance score successive highs. R&D obligations to industry (including FFRDC's) rise steadily but remain below the levels of 1966-68.

  Approximately three-fifths of the intramural R&D total in the current period represents personnel costs; i.e., salaries and related allowances for scientists and engineers and other support personnel.

- Other domestic performers, which consist of State and local governments and private individuals, show the largest relative increase in 1972 and 1973 of all performer groups.

- Foreign performers are supported by funds from the special foreign currency program (Public Law 480) as well as from regular appropriations.[3] The recent trend has been for the major part of foreign performance to be supported by special currencies, and the distribution of foreign R&D work by country has been increasingly determined by the availability of excess currencies. Despite current growth, the foreign R&D performance total in 1973 is expected to equal only one-half of 1 percent of total R&D obligations for that year.

Federal obligations for research a

[Dollars in r

Performer
Total . . . .
Federal intramural . . . .
Industrial firms . . . .
FFRDC's administered by industrial firms. . . . . .
Universities and colleges . . . .
FFRDC's administered by universities . . . .
Other nonprofit institutions . . . .
FFRDC's administered by other nonprofit institutions . . . .
Other domestic performers . . . .
Foreign performers . . . .

---

[3] This category includes only foreign scientists, organizations, or governments that carry on federally sponsored R&D projects outside the United States. Excluded are funds for federally financed projects performed abroad by U.S. Government employees or Federal agencies or by private U.S. organizations; also funds for support of American scientists working abroad or foreign scientists working in the United States.

are scheduled to receive higher

ons for intramural R&D perfor-
D performance score successive
ling FFRDC's) rise steadily but

ural R&D total in the current
ries and related allowances for
ersonnel.

of State and local governments
relative increase in 1972 and

unds from the special foreign
vell as from regular appropria-
e major part of foreign perfor-
ncies, and the distribution of
increasingly determined by the
current growth, the foreign
ted to equal only one-half of 1
ear.

Federal obligations for research and development by performer
[Dollars in millions]

Performer	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$15,550	$16,821	+ 8.2	$17,791	+ 5.8
Federal intramural	4,166	4,509	+ 8.2	4,598	+ 2.0
Industrial firms	7,631	8,121	+ 6.4	8,683	+ 6.9
FFRDC's administered by industrial firms	480	515	+ 7.3	553	+ 7.4
Universities and colleges	1,645	1,915	+16.5	2,126	+11.0
FFRDC's administered by universities	729	783	+ 7.4	818	+ 4.5
Other nonprofit institutions	486	510	+ 5.1	484	– 5.1
FFRDC's administered by other nonprofit institutions	210	197	– 6.1	208	+ 5.1
Other domestic performers	141	188	+32.9	228	+21.3
Foreign performers	63	83	+31.2	94	+13.0

nizations, or governments that carry on
Excluded are funds for federally financed
s or Federal agencies or by private U.S.
sts working abroad or foreign scientists

Federally Funded Research and Development Centers

- Federally Funded Research and Development Centers (FFRDC's) are R&D-performing or managing organizations exclusively or substantially financed by one or more Federal agencies. They are administered either by industrial firms, universities, or other nonprofit institutions, and at present the greatest support is provided to those administered by universities, an estimated 52 percent in 1973.

- The chief agency user of FFRDC's, by far, is AEC, which is expected to commit 65 percent of the obligations directed to FFRDC's in 1973. AEC predominates in the use of industry- and university-administered FFRDC's.

- DOD (primarily the Air Force) accounts for almost three-fourths of the support to FFRDC's administered by other nonprofit institutions. The next agency user is HEW, almost entirely through the National Institute of Education in 1973.

Federal R&D obligations to FFRDC's[a] by administering sector and agency, fiscal year 1973(est.)
[Dollars in millions]

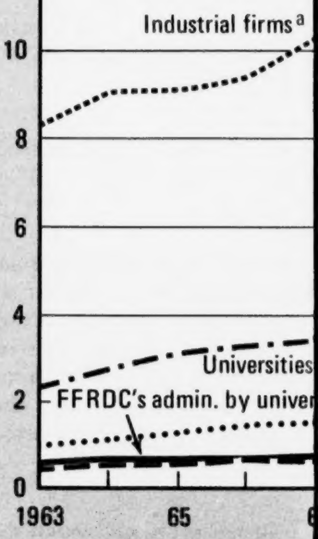
Sector	All agencies	AEC	DOD	NASA	NSF	HEW	Other
Total	$1,578.7	$1,025.0	$ 306.9	$ 146.8	$ 50.8	$ 34.4	$ 14.7
Industrial firms	553.3	541.3	4.0	.5	4.1	–	3.3
Universities and colleges	817.9	467.3	149.9	146.2	38.4	8.9	7.3
Other nonprofit institutions	207.5	16.4	153.0	.1	8.3	25.5	4.2

[a]Federally Funded Research and Development Centers.

Trends

- During the 1963-73 period, in
Federal R&D total will have
FFRDC's) to 52 percent while F
increased from 18 percent to 26
have increased from 7 percent to

Trends in Federal R&D ob



[a]Includes Federally Fund
(FFRDC's) administered by t

SOURCE: National Science Fo

evelopment Centers

pment Centers (FFRDC's) are
ns exclusively or substantially
. They are administered either
nonprofit institutions, and at
those administered by universi-

, is AEC, which is expected to
irected to FFRDC's in 1973.
y- and university-administered

or almost three-fourths of the
ner nonprofit institutions. The
through the National Institute

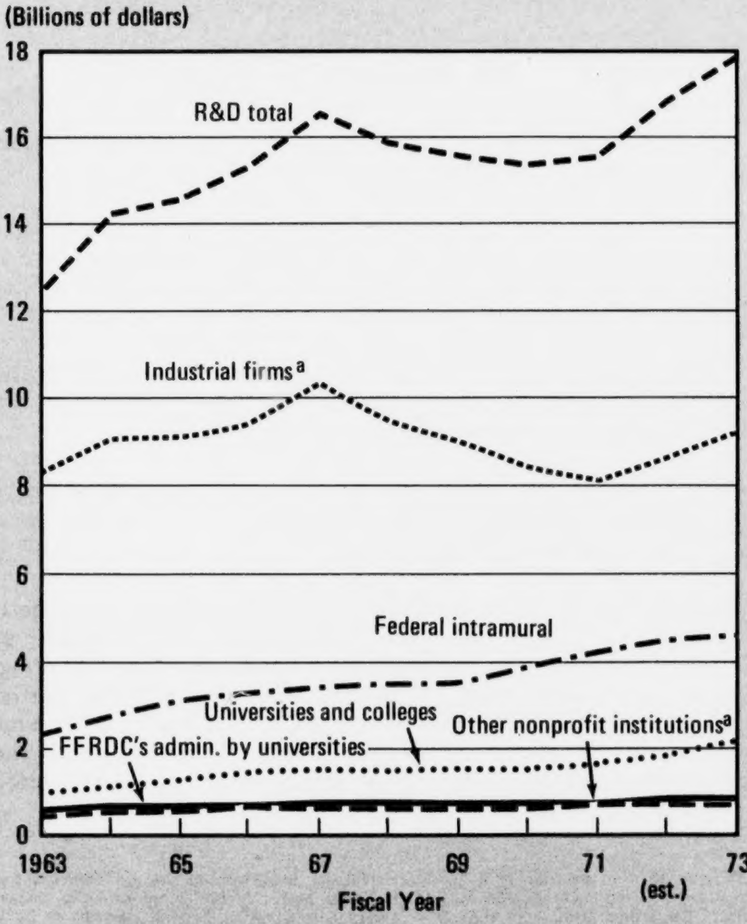
inistering sector and agency,
.)

D	NASA	NSF	HEW	Other
6.9	$ 146.8	$ 50.8	$ 34.4	$ 14.7
4.0	.5	4.1	–	3.3
9.9	146.2	38.4	8.9	7.3
3.0	.1	8.3	25.5	4.2

Trends

- During the 1963-73 period, industrial performance as a share of the Federal R&D total will have decreased from 66 percent (including FFRDC's) to 52 percent while Federal intramural performance will have increased from 18 percent to 26 percent and universities and colleges will have increased from 7 percent to 12 percent.

Trends in Federal R&D obligations by major performer



[a]Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

SOURCE: National Science Foundation

- The chief funding of industrial R&D performance has for many years been provided by DOD and NASA, and the decline in NASA's overall activities is the principal cause of diminished support to industry in recent years, just as DOD programs now influence rising industry support. In 1973 the DOD share of R&D support to industrial firms (including FFRDC's) is estimated at 62 percent of the Federal total, an unusually high share, whereas the share of support represented by NASA, AEC, and DOT is lower than in former years.

- DOD and NASA account for almost three-fourths of agency support for all Federal R&D intramural performance and, as in the case of industry, the DOD share of support to this sector is somewhat higher in 1973, and the NASA share somewhat lower than in recent years. Other agencies that have contributed to growth in this sector are HEW, USDA, Interior, and Commerce.

- Universities and colleges have throughout the 1963-73 decade derived their main R&D support from HEW, and since 1966 the share has grown each year. However, in 1973 it is expected to be 47 percent, slightly lower than in 1972. Despite this fact, HEW support of the university and college sector in 1973 is expected to cross the $1 billion line, the first time any one agency will make such a large commitment of funds to this sector.

- Other significant changes in university and college support have been the rising obligational level of NSF since 1969 and the declining obligational level of DOD (with a small upturn indicated in 1973). In 1963 DOD provided 25 percent of the support to universities and colleges, but in 1973 this agency is expected to provide just 10 percent. In 1963 the NSF share was 13 percent, whereas in 1973 it is expected to be 20 percent.

Character of Work

- Each performing sector engages in basic research, applied research, and development, but most sectors tend to concentrate on one kind of activity.

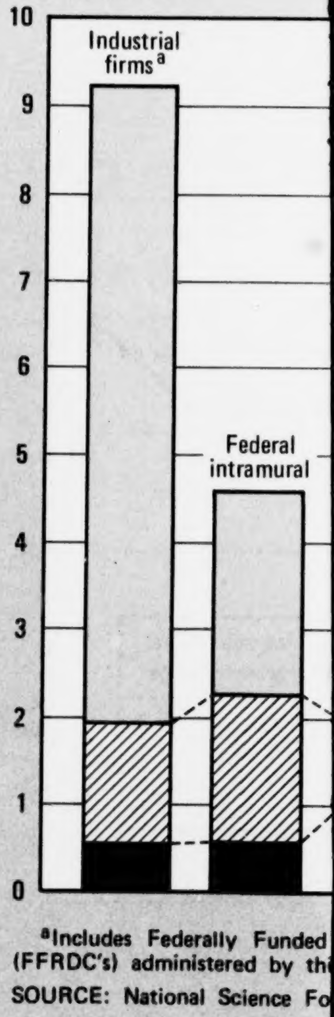
- Industrial firms carry out more development than they do research; in 1973 development is expected to make up 78 percent of the industry R&D total.

- Federal laboratories and personnel plan to focus 55 percent of their direct effort on development in 1973 but also to devote as much as 37 percent to applied research.

- Basic research is the special prov
1973 this sector is expected to
Federal agencies to basic research.

Federal obligations for resea
and character of work, FY 1

(Billions of dollars)



[a]Includes Federally Funded
(FFRDC's) administered by th

SOURCE: National Science Fo

erformance has for many years been decline in NASA's overall activities upport to industry in recent years, ising industry support. In 1973 the trial firms (including FFRDC's) is ral total, an unusually high share, nted by NASA, AEC, and DOT is

hree-fourths of agency support for nce and, as in the case of industry, or is somewhat higher in 1973, and in recent years. Other agencies that sector are HEW, USDA, Interior,

hout the 1963-73 decade derived nd since 1966 the share has grown ted to be 47 percent, slightly lower pport of the university and college $1 billion line, the first time any mmitment of funds to this sector.

and college support have been the 969 and the declining obligational cated in 1973). In 1963 DOD pro- versities and colleges, but in 1973 10 percent. In 1963 the NSF share is expected to be 20 percent.

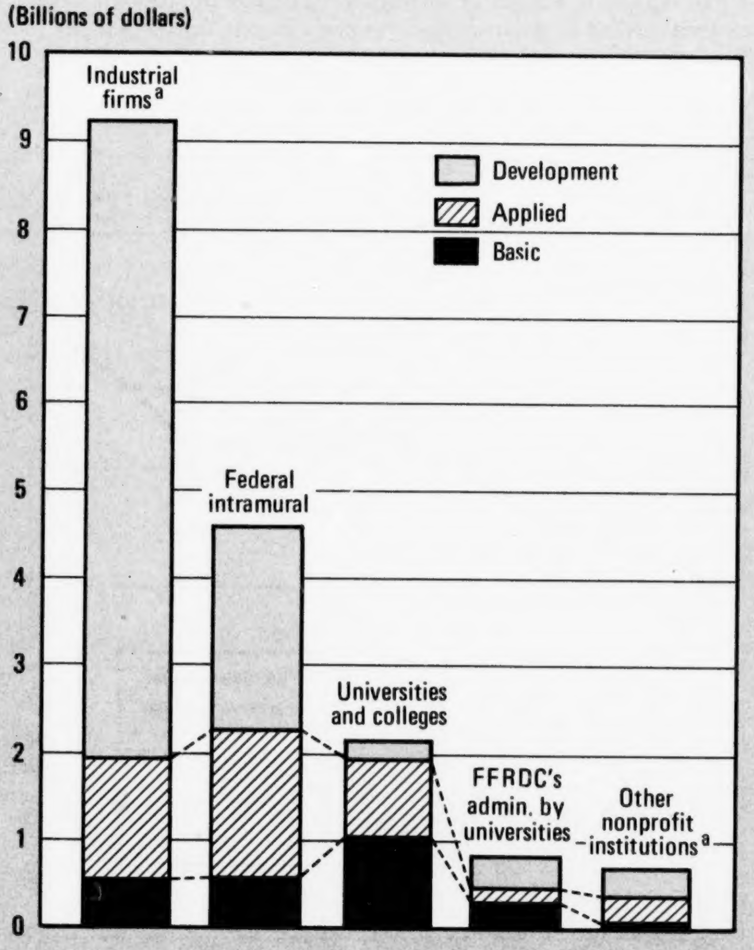
basic research, applied research, end to concentrate on one kind

pment than they do research; in e up 78 percent of the industry

to focus 55 percent of their direct to devote as much as 37 percent

- Basic research is the special province of universities and colleges, and in 1973 this sector is expected to devote 48 percent of its R&D work for Federal agencies to basic research.

Federal obligations for research and development, by performer and character of work, FY 1973 (est.)



[a]Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

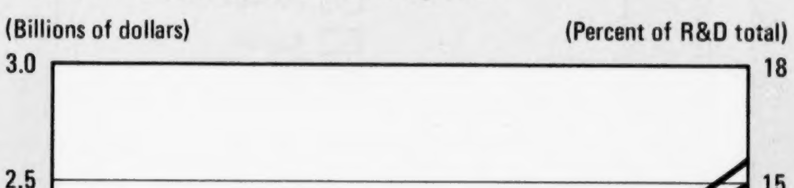
SOURCE: National Science Foundation.

Section 2. CHARACTER OF WORK

BASIC RESEARCH

- Federal support for basic research is expected to increase from $2.1 billion in 1971 to $2.4 billion in 1972 and $2.6 billion in 1973.
- These figures represent an average annual growth rate of 11 percent in the current period – greater than the growth rate of 10 percent in 1963-67. Growth in basic research between 1967 and 1971 was slight.

Trends in Federal basic research obligations



SOURCE: National Science Foundation

- Basic research obligations as a shar
expected to be 15 percent in 1973,

Agencies

The 1971-73 basic research effort by ag

Federal obligations for basic
[Dollars in mil

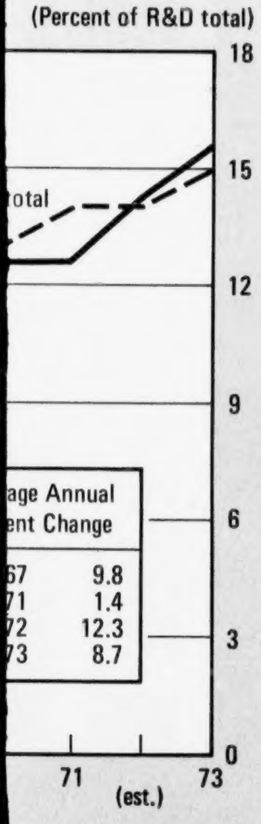
Agency	
Total	$
National Aeronautics and Space Administration	
Department of Health, Education, and Welfare	
National Science Foundation	
Atomic Energy Commission	
Department of Defense	
Other agencies	

- NASA, HEW, and NSF account for 7
million in basic research support in 197
- NASA increases are planned primarily
vide support for the Mariner or Pione
tion of Jupiter and Saturn and the V
exploration of Mars. Significant inc
astronomy for the high-energy astrono
- In 1973 the growth of basic research
generally rising trend in overall resea
accounts for a major portion of this inc
- NSF reflects largest relative increases
agencies in 1972 and 1973. The 1973
Research Project Support for all fields
be focused on areas where new knowle
solution of social, environmental, and e

OF WORK

pected to increase from $2.1 and $2.6 billion in 1973.

owth rate of 11 percent in the ate of 10 percent in 1963-67. d 1971 was slight.



- Basic research obligations as a share of Federal R&D obligations are expected to be 15 percent in 1973, compared to 11 percent in 1963.

Agencies

The 1971-73 basic research effort by agency is as follows:

Federal obligations for basic research, by agency
[Dollars in millions]

Agency	Actual 1971	Estimates 1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$2,132	$2,395	+12.3	$2,604	+ 8.7
National Aeronautics and Space Administration	680	750	+10.3	803	+ 7.0
Department of Health, Education, and Welfare	397	467	+17.5	523	+12.0
National Science Foundation	273	353	+29.7	402	+13.7
Atomic Energy Commission	277	270	− 2.4	283	+ 4.7
Department of Defense	262	265	+ 1.3	278	+ 5.0
Other agencies	244	289	+18.7	316	+ 9.2

- NASA, HEW, and NSF account for 75 percent of the increase of $209 million in basic research support in 1973.

- NASA increases are planned primarily for planetary exploration to provide support for the Mariner or Pioneer class spacecraft for the exploration of Jupiter and Saturn and the Viking unmanned spacecraft for the exploration of Mars. Significant increases are also planned in space astronomy for the high-energy astronomy observatory (HEAO).

- In 1973 the growth of basic research programs for HEW is part of a generally rising trend in overall research support for this agency. NIH accounts for a major portion of this increase.

- NSF reflects largest relative increases for basic research among all the agencies in 1972 and 1973. The 1973 increase is primarily for Scientific Research Project Support for all fields of science; particular attention will be focused on areas where new knowledge might lead to opportunities for solution of social, environmental, and engineering problems.

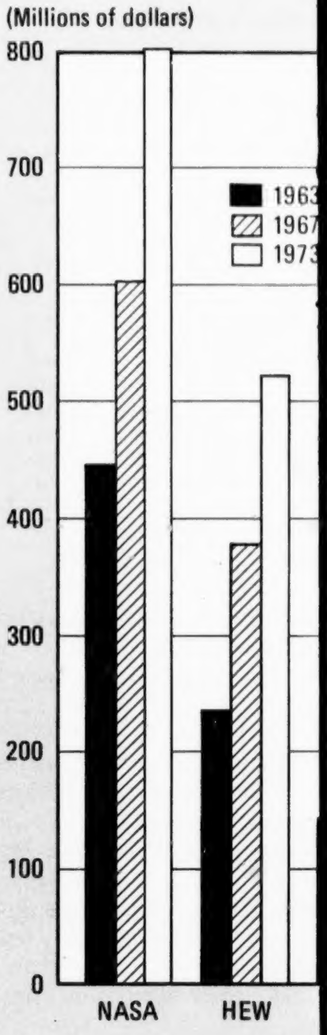
- AEC increases are planned for physical research, particularly in the areas of controlled thermonuclear fusion research and high energy physics.
- Within DOD, the Department of the Air Force is planning the largest basic research increase although all DOD components are expecting some expansion.
- Eleven agencies other than the leading five are sponsoring basic research programs in the current period. On a joint basis, these agencies account for 12 percent of the 1973 total.

Trends

- NASA had led throughout the decade in basic research, and even while its total R&D program was declining the basic research portion continued to increase. NASA's share of the Federal basic research total has ranged from a high of 33 percent in 1964 to a low of 30 percent in 1967 – and is an estimated 31 percent in 1973.

  The chief reason for NASA's high level of basic research funding lies in the nature of its experiments, which call for large outlays for expendable equipment such as launch vehicles and spacecraft.
- HEW has been the second largest supporter of basic research throughout the 1963-73 period. Its average annual rate of growth has been second only to that of NSF. HEW is expected to account for 20 percent of the total Federal basic research effort in 1973, compared with 17 percent in 1963.
- NSF, whose rate of growth both in 1963-67 and 1967-73 is the highest among all agencies, fosters work to extend fundamental knowledge in every scientific field. NSF is the third agency in size of basic research support in 1972 and is expected to increase its share of the Federal total from 10 percent in 1963 to 15 percent in 1973.
- AEC and DOD show small average annual declines between 1967 and 1973, and both agencies have decreased significantly in their shares of the Federal total. The AEC share fell from 16 percent of the total in 1963 to an estimated 11 percent in 1973 while the DOD share declined from 17 percent to 11 percent.
- USDA, Commerce, Interior, and the Smithsonian are primarily responsible for the growth in the "other agency" group throughout the 1963-73 decade.

Federal obligations for basi
FY 1963, 1967 and 1973 (e



SOURCE: National Science Fou

ical research, particularly in the areas
n research and high energy physics.

the Air Force is planning the largest
ll DOD components are expecting

ling five are sponsoring basic research
n a joint basis, these agencies account

nds

ade in basic research, and even while
g the basic research portion continued
ederal basic research total has ranged
o a low of 30 percent in 1967 – and is

vel of basic research funding lies in the
call for large outlays for expendable
nd spacecraft.

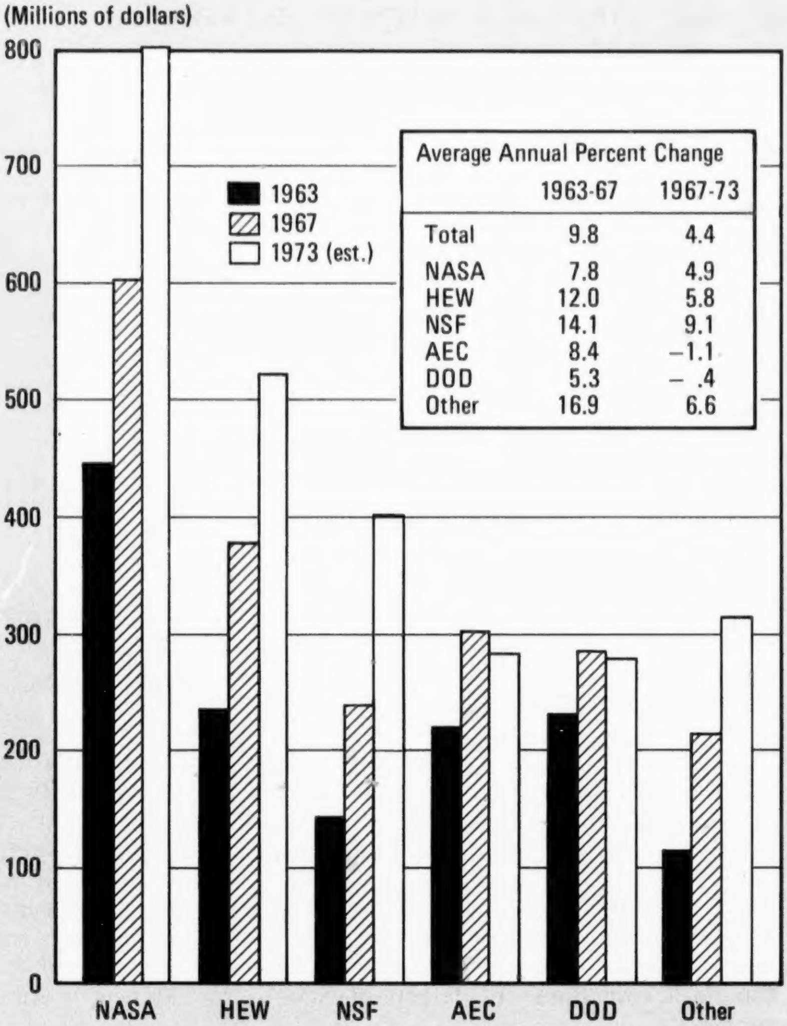
ipporter of basic research throughout
nual rate of growth has been second
ted to account for 20 percent of the
in 1973, compared with 17 percent

n 1963-67 and 1967-73 is the highest
to extend fundamental knowledge in
hird agency in size of basic research
increase its share of the Federal total
nt in 1973.

e annual declines between 1967 and
ased significantly in their shares of the
om 16 percent of the total in 1963 to
hile the DOD share declined from 17

Smithsonian are primarily responsible
ncy" group throughout the 1963-73

Federal obligations for basic research, by agency, FY 1963, 1967 and 1973 (est.)



Average Annual Percent Change	1963-67	1967-73
Total	9.8	4.4
NASA	7.8	4.9
HEW	12.0	5.8
NSF	14.1	9.1
AEC	8.4	–1.1
DOD	5.3	– .4
Other	16.9	6.6

SOURCE: National Science Foundation

Performers

Basic research performance in the 1971-73 period is as follows:

Federal obligations for basic research, by performer
[Dollars in millions]

Performer	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$2,132	$2,395	+12.3	$2,604	+ 8.7
Federal intramural	535	578	+ 8.1	590	+ 2.2
Industrial firms[a]	442	500	+13.2	552	+10.4
Universities and colleges	794	913	+15.0	1,024	+12.1
FFRDC's administered by universities and colleges	260	287	+10.2	301	+ 5.2
Other nonprofit institutions[a]	75	85	+13.8	94	+11.0
Other performers	27	33	+20.6	43	+31.0

[a] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

- In 1972 and 1973 the estimated increases in Federal basic research obligations to universities and colleges are the largest to any major performing sector, both in absolute and relative terms. They primarily reflect growing HEW and NSF support.

- The NSF share of the Federal basic research total to universities and colleges will increase from 28 percent in 1971 to an estimated 34 percent in 1973. HEW, despite large increases in such support, is expected to maintain its share of the total at 34 percent for each of the 1971-73 years.

- The Federal intramural sector, second in size of basic research support, is expected to rise in performance in 1972 and 1973 but relatively less than any other sector. Increases on the part of DOD and HEW more than offset the small reductions on the part of NASA, chief agency in intramural support.

- In the case of industrial firms, NASA is by far the leading basic research support agency and is responsible for the significant increases in 1972 and 1973, which are related to the Viking and Pioneer programs.

Tr

- The share of the basic research
college sector has increased from
percent in 1973.

- NSF, HEW, and DOD programs
growth of basic research in univ
1967; NSF and HEW also accou
to 1973. The decline between
result of HEW cutbacks, then in
DOD's basic research to that wh
ship to a mission or function of th

- From 1963 to 1970 the growth
basic research arose primarily fro
next, from growth of in-house wo
decline in 1971 was primarily caus

- Industrial performance of basic
percent of the Federal total in 1
1973 the share is expected to be
trially performed basic research
which accounts for 80 percent to

-73 period is as follows:

ic research, by performer
millions]

Actual	Estimates			
1971	1972	Percent change 1971-72	1973	Percent change 1972-73
$2,132	$2,395	+12.3	$2,604	+ 8.7
535	578	+ 8.1	590	+ 2.2
442	500	+13.2	552	+10.4
794	913	+15.0	1,024	+12.1
260	287	+10.2	301	+ 5.2
75	85	+13.8	94	+11.0
27	33	+20.6	43	+31.0

DC's) administered by this sector.

eases in Federal basic research obliga-
the largest to any major performing
terms. They primarily reflect growing

ic research total to universities and
t in 1971 to an estimated 34 percent
ses in such support, is expected to
ercent for each of the 1971-73 years.

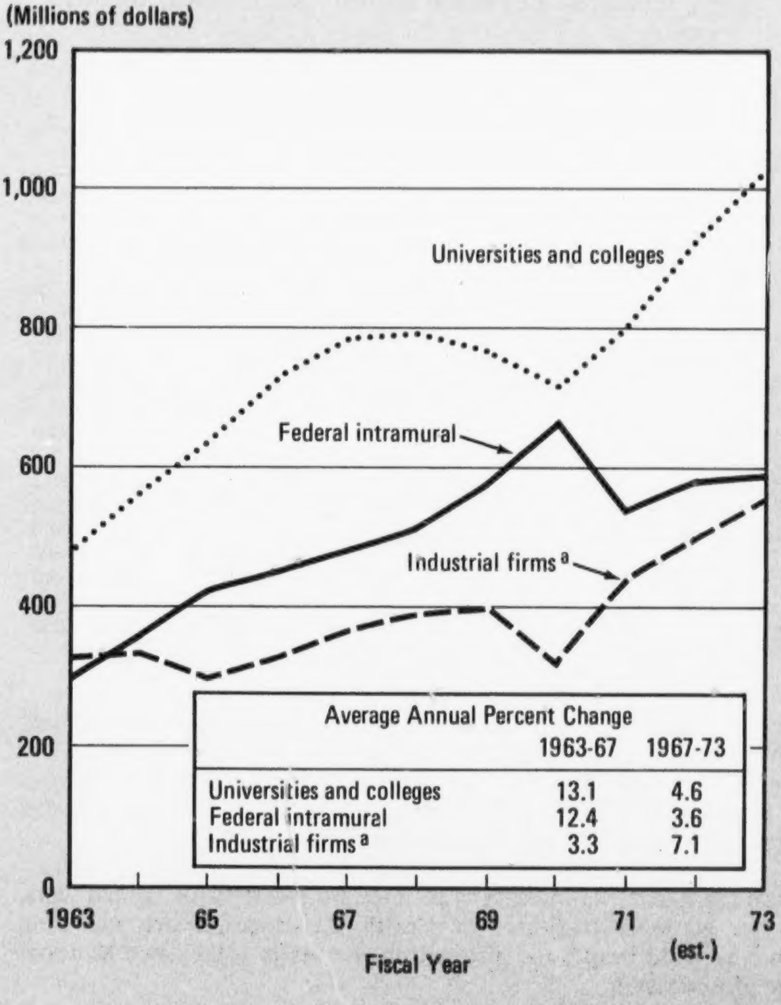
d in size of basic research support, is
972 and 1973 but relatively less than
t of DOD and HEW more than offset
NASA, chief agency in intramural

A is by far the leading basic research
the significant increases in 1972 and
and Pioneer programs.

Trends

- The share of the basic research total performed by the university and college sector has increased from 35 percent in 1963 to an estimated 39 percent in 1973.
- NSF, HEW, and DOD programs were primarily responsible for the rapid growth of basic research in universities and colleges between 1963 and 1967; NSF and HEW also account for much of this growth from 1970 to 1973. The decline between 1968 and 1970 was, first, largely the result of HEW cutbacks, then in 1970 the result of a legal limitation on DOD's basic research to that which had a direct and apparent relationship to a mission or function of the department.
- From 1963 to 1970 the growth in Federal intramural performance of basic research arose primarily from increased work on the part of NASA, next, from growth of in-house work on the part of HEW and DOD. The decline in 1971 was primarily caused by lessened HEW support.
- Industrial performance of basic research has ranged from a high of 23 percent of the Federal total in 1963 to a low of 15 percent in 1970. In 1973 the share is expected to be 21 percent. The whole trend of industrially performed basic research has been strongly influenced by NASA, which accounts for 80 percent to 90 percent of the total for this sector.

Trends in Federal basic research obligations by major performer



Average Annual Percent Change	1963-67	1967-73
Universities and colleges	13.1	4.6
Federal intramural	12.4	3.6
Industrial firms [a]	3.3	7.1

[a] Includes Federally Funded Research and Development Centers (FFRDC's) administered by industrial firms.

SOURCE: National Science Foundation.

Fields

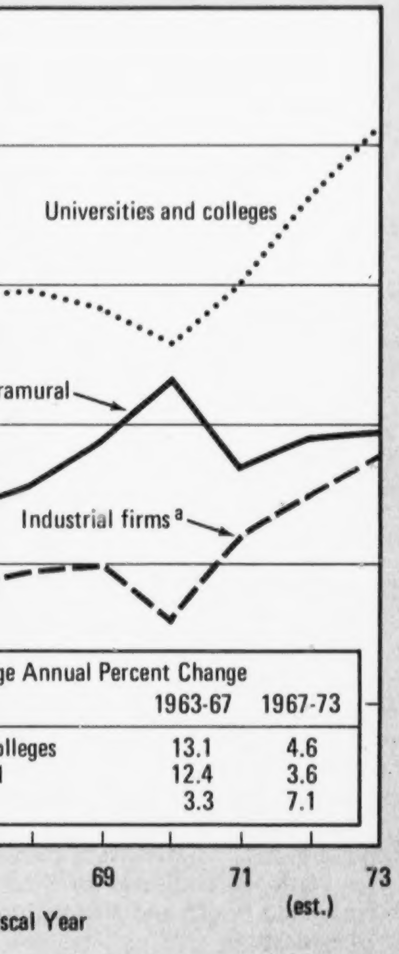
- The physical sciences share
  37 percent in 1963 to an es
  cant increases are planned
  share is expected to be 3
  supporters of the physical sc
- Obligations to the life scien
  the basic research total in 1
  are accounted for by HEW.
  27 percent of the basic rese
- The environmental sciences
  the same share is estimate
  supported by NASA throu
  also provide substantial supp
- The shares of mathematics a
  in the 1963-73 decade while
  – from 2 percent to 4 percen

Federal obligations

Field of science
Total
Life sciences
Psychology
Physical sciences
Astronomy
Chemistry
Physics
Other
Environmental sciences
Atmospheric
Geological
Oceanography
Other
Mathematics
Engineering
Social sciences
Other sciences

[a] Less than $500,000.

bligations by major performer



Research and Development Centers
strial firms.

dation.

Fields

- The physical sciences share of the basic research total has decreased from 37 percent in 1963 to an estimated 32 percent in 1972. However, significant increases are planned for 1973, particularly by NASA; the 1973 share is expected to be 33 percent. NASA and AEC are the largest supporters of the physical sciences field.
- Obligations to the life sciences are expected to amount to 31 percent of the basic research total in 1973; more than one-half of these obligations are accounted for by HEW. Obligations to the life sciences in 1963 were 27 percent of the basic research total, significantly lower than at present.
- The environmental sciences made up 18 percent of the total in 1963 and the same share is estimated for 1973. This field has been primarily supported by NASA throughout the decade. However, NSF and DOD also provide substantial support to the environmental sciences.
- The shares of mathematics and engineering show a slightly declining trend in the 1963-73 decade while the share of the social sciences has doubled – from 2 percent to 4 percent.

Federal obligations for basic research, by field of science
[Dollars in millions]

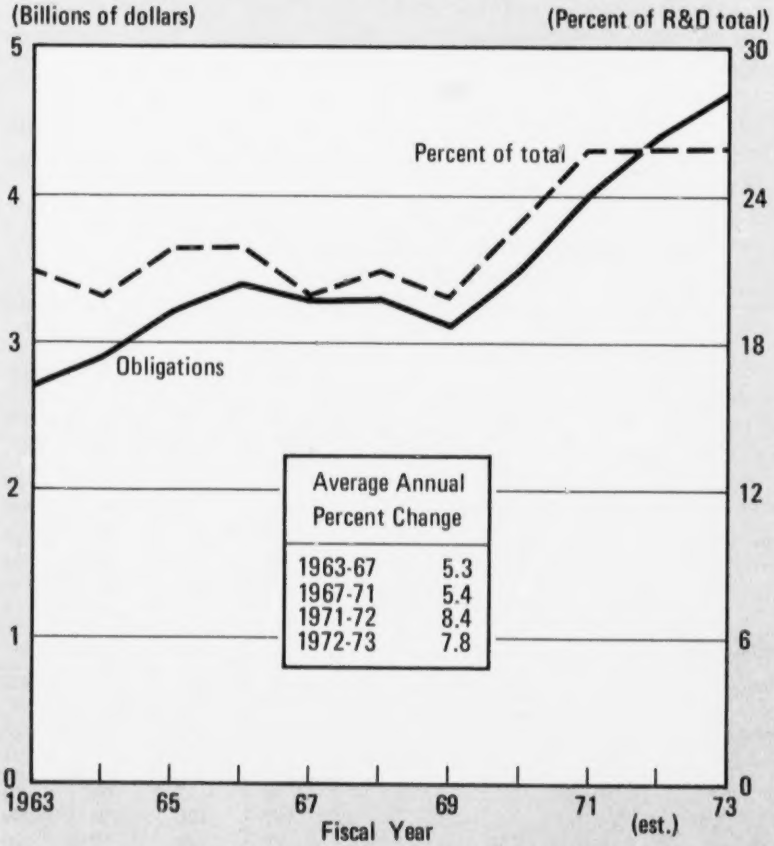
Field of science	Actual		Estimates	
	1963	1971	1972	1973
Total	$1,389	$2,132	$2,395	$2,604
Life sciences	380	596	738	814
Psychology	36	49	58	62
Physical sciences	515	743	770	872
Astronomy	140	217	201	236
Chemistry	89	133	183	195
Physics	269	387	381	440
Other	17	7	3	1
Environmental sciences	252	393	456	467
Atmospheric	89	201	227	232
Geological	145	132	160	163
Oceanography	18	58	66	73
Other	–	2	2	(a)
Mathematics	42	52	60	60
Engineering	137	220	226	209
Social sciences	25	70	81	106
Other sciences	2	10	8	14

[a] Less than $500,000.

APPLIED RESEARCH

- Federal support of applied research is scheduled to increase from $4.0 billion in 1971 to $4.4 billion in 1972 and to $4.7 billion in 1973.
- These estimates represent an 8-percent average growth rate for the 1971-73 period, continuing the significant increases in applied research funding that began in 1969.
- The applied research share of the Federal R&D total is 26 percent in each of the three current years, compared with 20 percent in 1969. The applied research share was 21 percent in 1963.

Trends in Federal applied research obligations



SOURCE: National Science Foundation

Agencies

The major agency supporters of Federal a

Federal obligations for applied r

[Dollars in million

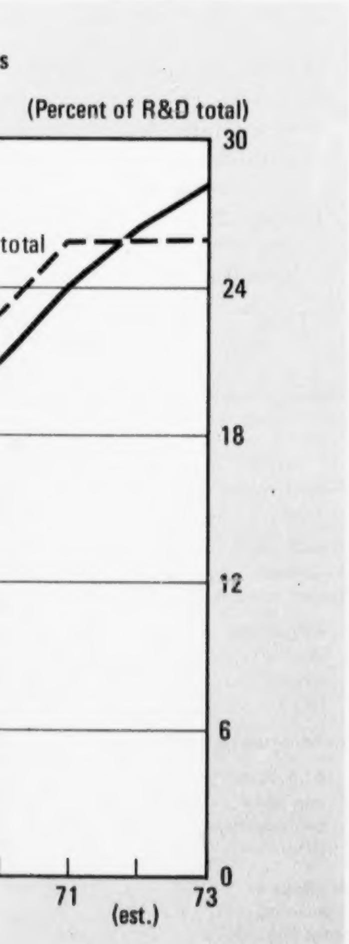
Agency	Actu 197
Total	$4,0
Department of Defense	1,3
Department of Health, Education, and Welfare	9
National Aeronautics and Space Administration	8
Department of Agriculture	1
Department of Transportation	1
Atomic Energy Commission	1
Department of Commerce	
Department of the Interior	
National Science Foundation	4
Veterans Administration	5
Environmental Protection Agency	4
Office of Economic Opportunity	6
Other agencies	7

- DOD reflects the largest increase in appli which most is planned by the Defense A program of technical support to the Off and to organizations of the Joint Chiefs scheduled increases in their applied resear
- The second largest 1973 increase is plann within the National Institutes of Heal research, and child health and also withi Institute of Education.
- NASA remains the third agency in size although it plans the smallest relative inc decreases in applied research related to are more than offset by increases in aero and expansion in the space applications pr

heduled to increase from $4.0 and to $4.7 billion in 1973.

average growth rate for the t increases in applied research

R&D total is 26 percent in each 20 percent in 1969. The applied



Agencies

The major agency supporters of Federal applied research are as follows:

Federal obligations for applied research, by agency
[Dollars in millions]

Agency	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$4,018	$4,354	+ 8.4	$4,693	+ 7.8
Department of Defense	1,351	1,429	+ 5.7	1,514	+ 6.0
Department of Health, Education, and Welfare	905	1,047	+15.7	1,123	+ 7.2
National Aeronautics and Space Administration	817	827	+ 1.2	843	+ 2.0
Department of Agriculture	174	197	+13.2	201	+ 2.2
Department of Transportation	173	154	−10.9	189	+22.6
Atomic Energy Commission	152	157	+ 3.2	171	+ 9.1
Department of Commerce	72	92	+27.8	128	+39.7
Department of the Interior	86	95	+10.3	100	+ 5.1
National Science Foundation	46	71	+54.6	95	+34.3
Veterans Administration	59	64	+ 8.3	71	+10.6
Environmental Protection Agency	48	59	+22.7	68	+15.8
Office of Economic Opportunity	60	61	+ 2.3	65	+ 5.4
Other agencies	75	103	+35.9	124	+21.2

- DOD reflects the largest increase in applied research support in 1973, of which most is planned by the Defense Agencies, primarily to expand the program of technical support to the Office of the Secretary of Defense and to organizations of the Joint Chiefs of Staff. The three services also scheduled increases in their applied research efforts in 1973.

- The second largest 1973 increase is planned by HEW for expanded work within the National Institutes of Health on cancer, heart and lung research, and child health and also within the newly established National Institute of Education.

- NASA remains the third agency in size of the applied research effort, although it plans the smallest relative increase in the 1973 budget. Sizable decreases in applied research related to the Apollo program and Skylab are more than offset by increases in aeronautical research and technology and expansion in the space applications programs.

- USDA has for many years been one of the major Federal sponsors of applied research, particularly for work by the Agricultural Research Service, the Cooperative State Research Service, and the Forest Service.

- The scheduled increase in AE ,'s applied research effort is planned primarily for research related to weapons technology and detection techniques and for environmental research.

- All subdivisions within DOT are expected to contribute to the overall agency increase in 1973 except for the Federal Aviation Agency, whose work is declining as a result of cancellation of the SST.

- Commerce and NSF are scheduled for the largest relative increases in applied research support in 1973. For Commerce these increases are largely for the National Bureau of Standards for a new program to explore ways of stimulating more research in the private sector and for programs of the National Oceanic and Atmospheric Administration. For NSF growth is mainly in the Research Applied to National Needs (RANN) program and in the new R&D incentives and R&D assessment programs.

Trends

- The 1963-73 period is characterized by expansion of the applied research effort of HEW and agencies other than the leading six and the reduction of the DOD share of the Federal applied research total.

- DOD, still the chief agency supporting applied research, accounted for 52 percent of all Federal applied research in 1963; however, its share in 1973 is expected to be only 32 percent. DOD programs showed an actual dollar decline between 1963 and 1967 and, except for NASA, the lowest growth rate among the agencies from 1967 to 1973.

- HEW, by comparison, shows the largest dollar increase during the 1963-73 period of any agency; it is expected to account for 24 percent of all Federal applied research in 1973, compared with 16 percent in 1963.

- NASA's applied research programs reflect a growth rate of only 1 percent between 1967 and 1973, the lowest of any major agency supporter of applied research, and in 1973 NASA is expected to be considerably below HEW in its applied research effort.

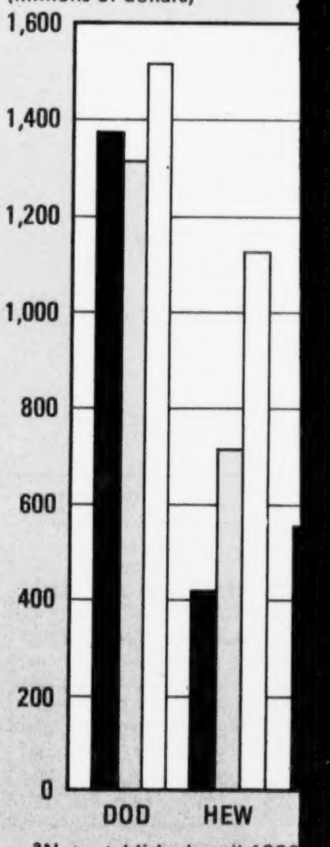
- DOT was not established until 1966, and therefore its average annual growth rate of 34 percent between 1967 and 1973 is figured from a low base. Nonetheless, DOT is expected to be fifth largest supporter of applied research in 1973.

- AEC shows strong growth,
rate of growth is second onl

- Much of the growth of
agencies or agency subdivi
period, such as OEO, EPA
merce. Expansion of prog
Interior, and other subdiv
growth. The "other" agenc
the Federal applied resear
in 1963.

Federal obligations for ap
FY 1963, 1967, and 197

(Millions of dollars)



ᵃNot established until 1966
SOURCE: National Science F

f the major Federal sponsors of
y the Agricultural Research Serv-
ervice, and the Forest Service.

lied research effort is planned
s technology and detection tech-

ted to contribute to the overall
Federal Aviation Agency, whose
n of the SST.

the largest relative increases in
Commerce these increases are
rds for a new program to explore
private sector and for programs
heric Administration. For NSF
ied to National Needs (RANN)
and R&D assessment programs.

xpansion of the applied research
ne leading six and the reduction
esearch total.

pplied research, accounted for 52
1963; however, its share in 1973
rograms showed an actual dollar
pt for NASA, the lowest growth
3.

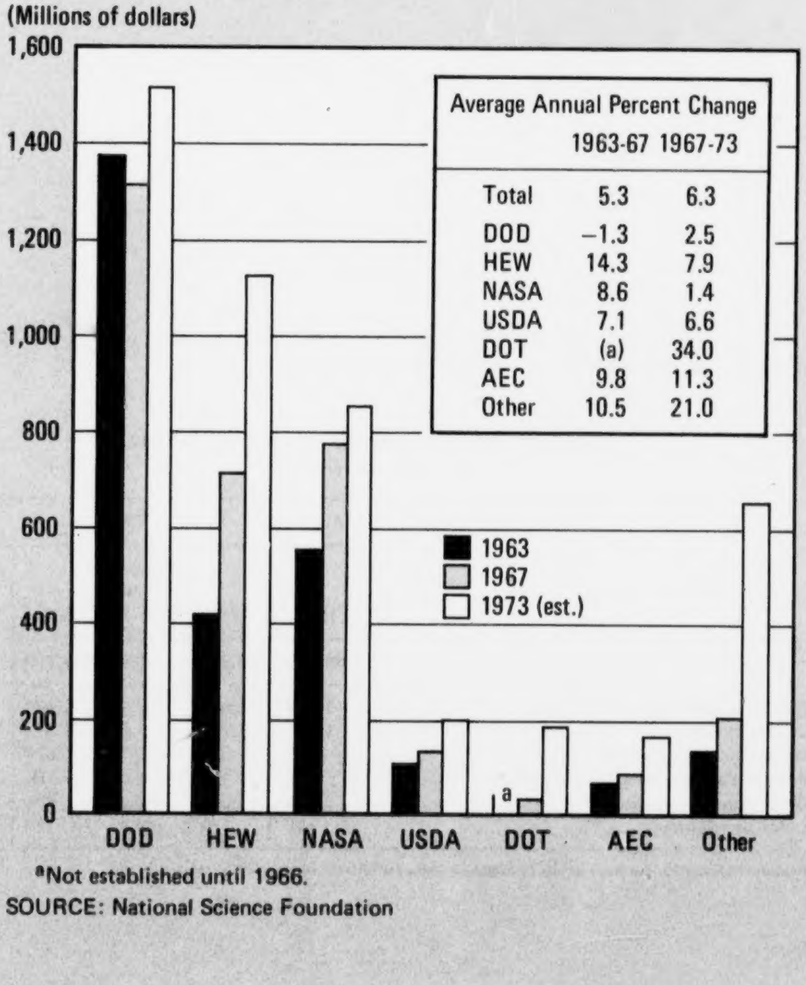
ollar increase during the 1963-73
account for 24 percent of all
ared with 16 percent in 1963.

a growth rate of only 1 percent
any major agency supporter of
pected to be considerably below

nd therefore its average annual
and 1973 is figured from a low
be fifth largest supporter of

- AEC shows strong growth, particularly in the 1967-73 period, when its rate of growth is second only to DOT.
- Much of the growth of the "other agency" group comes from new agencies or agency subdivisions which were organized in the 1963-73 period, such as OEO, EPA, and NOAA within the Department of Commerce. Expansion of programs of established agencies like NSF, VA, Interior, and other subdivisions of Commerce also contribute to this growth. The "other" agencies are expected to account for 14 percent of the Federal applied research total in 1973, compared with 5 percent in 1963.

Federal obligations for applied research, by agency, FY 1963, 1967, and 1973 (est.)



Average Annual Percent Change	1963-67	1967-73
Total	5.3	6.3
DOD	−1.3	2.5
HEW	14.3	7.9
NASA	8.6	1.4
USDA	7.1	6.6
DOT	(a)	34.0
AEC	9.8	11.3
Other	10.5	21.0

[a] Not established until 1966.

SOURCE: National Science Foundation

Performers

The obligations directed to each sector for performance of applied research in the current period are given below:

Federal obligations for applied research, by performer
[Dollars in millions]

Performer	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$4,018	$4,354	+ 8.4	$4,693	+ 7.8
Federal intramural	1,499	1,594	+ 6.4	1,683	+ 5.6
Industrial firms[a]	1,261	1,282	+ 1.6	1,443	+12.6
Universities and colleges	701	844	+20.3	929	+10.1
FFRDC's administered by universities	139	155	+11.9	166	+ 6.6
Other nonprofit institutions[a]	292	328	+12.3	294	−10.4
Other performers	126	151	+19.9	179	+18.0

[a] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

- Industrial firms are expected to re
  crease in total Federal applied rese
  program changes by DOD and O
  supporters of applied research in thi

  However, the chief performing se
  tinues to be the Federal one, an
  both 1972 and 1973. DOD, NASA,
  programs, and each of these is expec

- Universities and colleges show sizab
  support in each year of the curre
  account for almost 60 percent of t
  1973. HEW, Commerce, NSF, DO
  of the 1973 anticipated applied rese

ch sector for performance of applied
en below:

pplied research, by performer

in millions]

	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
. .	$4,018	$4,354	+ 8.4	$4,693	+ 7.8
. .	1,499	1,594	+ 6.4	1,683	+ 5.6
. .	1,261	1,282	+ 1.6	1,443	+12.6
. .	701	844	+20.3	929	+10.1
. .	139	155	+11.9	166	+ 6.6
. .	292	328	+12.3	294	−10.4
. .	126	151	+19.9	179	+18.0

FFRDC's) administered by this sector.

- Industrial firms are expected to receive almost one-half of the 1973 increase in total Federal applied research obligations, mainly as a result of program changes by DOD and OEO. DOD and NASA are the major supporters of applied research in this sector.

  However, the chief performing sector for overall applied research continues to be the Federal one, and moderate increases are expected in both 1972 and 1973. DOD, NASA, and HEW have the largest intramural programs, and each of these is expected to increase in 1973.

- Universities and colleges show sizable relative growth in applied research support in each year of the current period. HEW alone is expected to account for almost 60 percent of total Federal support to this sector in 1973. HEW, Commerce, NSF, DOD, and DOT are responsible for most of the 1973 anticipated applied research expansion.

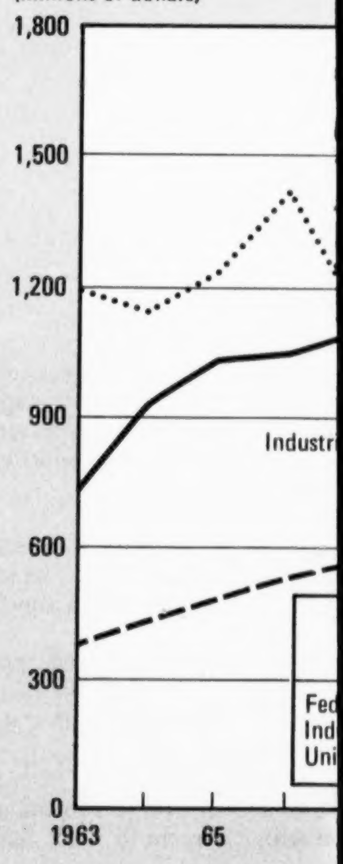
Trends

- The most significant trend among performers of applied research is the almost steady rise of the Federal intramural sector. In 1968 this sector became the largest in size of applied research effort, and it has maintained that position ever since. The intramural share of the Federal applied research total is expected to be 36 percent in 1973, compared with 28 percent in 1963. DOD, NASA, and HEW have been the major contributors to this rise.

- Industrial firms, as an area for Federal applied research performance, were in the lead in 1963 but declined from 1966 to 1969. Since then the industry sector has risen steadily. Changes in DOD and NASA programs have been primarily responsible for these shifts.

- Universities and colleges display a continuing increase in applied research for the entire 1963-73 period and have increased their share of the Federal applied research total from 14 percent in 1963 to an estimated 20 percent in 1973. This expansion is most attributable to HEW.

Trends in Federal applied re



ªIncludes Federally Funded
(FFRDC's) administered by in

SOURCE: National Science Fou

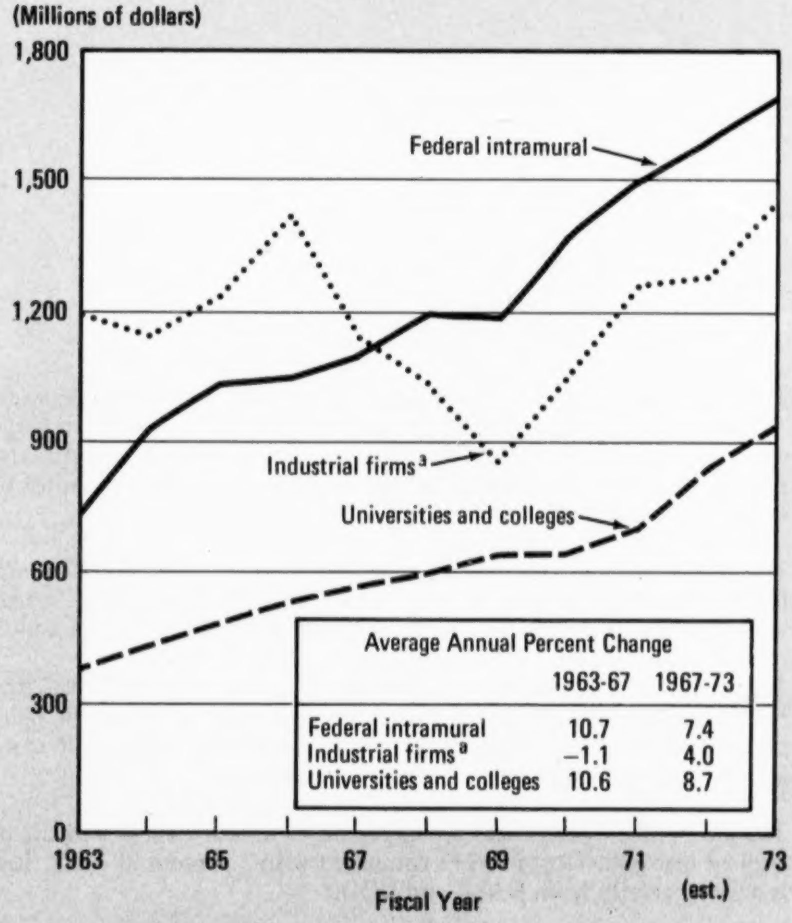
ds

performers of applied research is the tramural sector. In 1968 this sector research effort, and it has maintained mural share of the Federal applied percent in 1973, compared with 28 EW have been the major contributors

deral applied research performance, d from 1966 to 1969. Since then the hanges in DOD and NASA programs ese shifts.

ntinuing increase in applied research e increased their share of the Federal t in 1963 to an estimated 20 percent utable to HEW.

Trends in Federal applied research obligations by major performer



Average Annual Percent Change	1963-67	1967-73
Federal intramural	10.7	7.4
Industrial firms[a]	−1.1	4.0
Universities and colleges	10.6	8.7

[a] Includes Federally Funded Research and Development Centers (FFRDC's) administered by industrial firms.

SOURCE: National Science Foundation

Fields

- The engineering sciences continue to be the field with the largest amount of applied research support. However, the share of this field in the applied research total has decreased from 49 percent in 1963 to an estimated 44 percent in 1973. DOD and NASA have contributed most to support of the engineering sciences.

- The life sciences are expected to increase in share of the applied research total from 20 percent to 28 percent between 1963 and 1973. The largest investments in this area are made by HEW, followed by USDA and DOD.

- The physical sciences show a decrease from 14 percent of the applied research total in 1963 to an estimated 8 percent in 1973. In fact, the dollar level in 1973 is actually below the 1963 dollar level. DOD and AEC are the principal supporters of the physical sciences.

- The environmental sciences are expected to account for 7 percent of the applied research effort in 1973 compared with 8 percent in 1963. Support is derived chiefly from NASA and DOD.

- The social sciences reflect the largest relative increase from 1963 to 1973 and during that period their share of the applied research total is expected to move from 2 percent to 6 percent. They receive support chiefly from HEW, OEO, and USDA.

- Psychology and mathematics each represent 2 percent of the applied research total in 1973. DOD is the largest supporter of both of these areas.

Federal obligations for applie

[Dollars in

Field of science
Total
Life sciences
Psychology
Physical sciences
Astronomy
Chemistry
Physics
Other
Environmental sciences
Atmospheric
Geological
Oceanography
Other
Mathematics
Engineering
Social sciences
Other sciences

the field with the largest amount
e share of this field in the applied
rcent in 1963 to an estimated 44
ontributed most to support of the

e in share of the applied research
tween 1963 and 1973. The largest
EW, followed by USDA and DOD.

from 14 percent of the applied
8 percent in 1973. In fact, the
1963 dollar level. DOD and AEC
al sciences.

d to account for 7 percent of the
d with 8 percent in 1963. Support

lative increase from 1963 to 1973
applied research total is expected
hey receive support chiefly from

resent 2 percent of the applied
supporter of both of these areas.

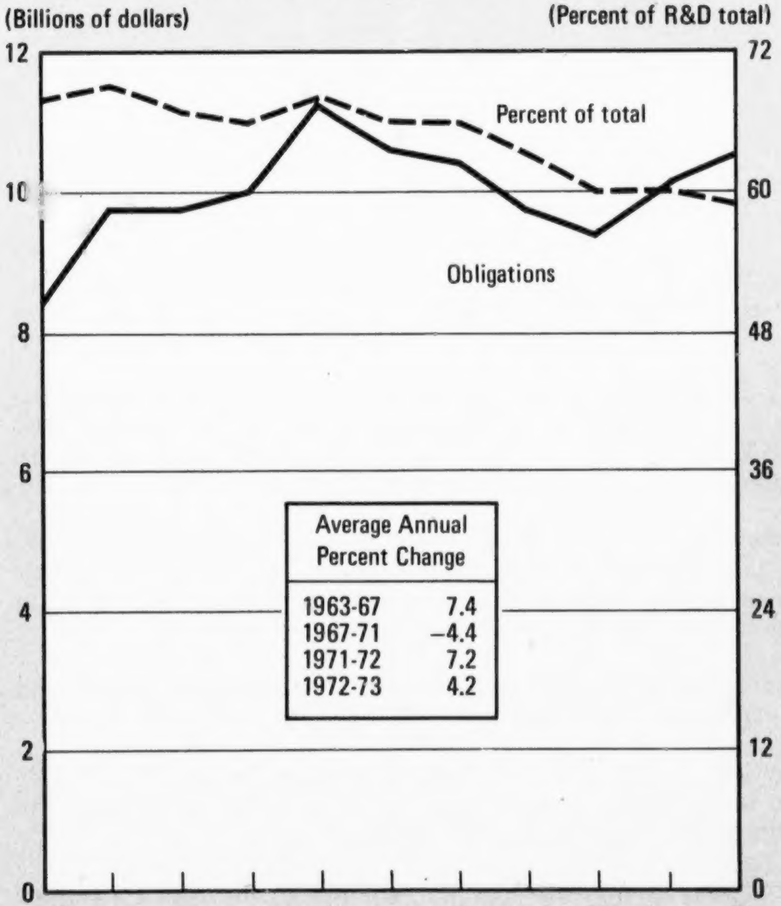
Federal obligations for applied research, by field of science
[Dollars in millions]

Field of science	Actual		Estimates	
	1963	1971	1972	1973
Total	$2,652	$4,018	$4,354	$4,963
Life sciences	542	1,078	1,229	1,312
Psychology	35	67	83	83
Physical sciences	369	299	347	359
Astronomy	10	4	5	5
Chemistry	112	107	114	125
Physics	232	156	190	192
Other	15	33	38	37
Environmental sciences	203	285	309	337
Atmospheric	118	152	156	167
Geological	63	75	86	94
Oceanography	16	38	41	47
Other	6	19	26	30
Mathematics	45	69	78	82
Engineering	1,308	1,891	1,938	2,049
Social sciences	55	236	250	297
Other sciences	95	92	121	173

DEVELOPMENT

- The anticipated increases in Federal obligations for development, from $9.4 billion in 1971 to $10.1 billion in 1972 and $10.5 billion in 1973, represent the first gains since 1967.
- However, the 1973 estimate is still below the 1967 peak of $11.3 billion.
- The development share of the Federal R&D total is expected to be 59 percent in 1973, compared with 68 percent in 1963.

Trends in Federal development obligations



SOURCE: National Science Foundation

Agencies

The agencies currently most heavily development programs are shown as fo

Federal obligations for d
[Dollars in

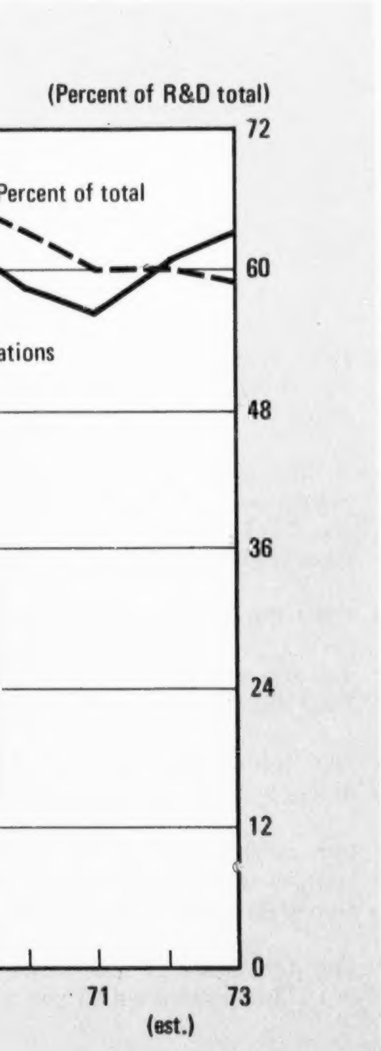
Agency
Total . . . .
Department of Defense . . . .
National Aeronautics and Space Administration
Atomic Energy Commission . . . .
Department of Health, Education, and Welfare
Department of Transportation . . . .
Other agencies . . . .

- DOD has scheduled the largest d DOD, chief development expansion cluding a major effort on the U (ULMS). The aircraft program of crease substantially for work on strategic bomber, the lightweight superiority fighter.
- Virtually no change occurs in the l in 1973 since decreases in the Apo development activities related to th including Skylab and the space shut
- The 1973 increase for AEC is main of an economic liquid-metal fast-b ting decreases are planned for the for nuclear weapons testing activitie
- HEW programs reflect the largest r and the actual increases for this age primarily the result of expanded Cancer Institute.
- The decline in DOT development cancellation of the SST.

ligations for development, from
1972 and $10.5 billion in 1973,

v the 1967 peak of $11.3 billion.

R&D total is expected to be 59
nt in 1963.



Agencies

The agencies currently most heavily engaged in the sponsorship of Federal development programs are shown as follows:

Federal obligations for development, by agency
[Dollars in millions]

Agency	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$9,399	$10,071	+ 7.2	$10,494	+ 4.2
Department of Defense	5,896	6,681	+13.3	6,981	+ 4.5
National Aeronautics and Space Administration	1,761	1,631	– 7.4	1,629	– .1
Atomic Energy Commission	874	881	+ .8	921	+ 4.5
Department of Health, Education, and Welfare	174	249	+43.6	311	+24.8
Department of Transportation	309	210	–32.1	191	– 8.9
Other agencies	385	420	+ 9.0	460	+ 9.6

- DOD has scheduled the largest dollar increases of any agency. Within DOD, chief development expansion in 1973 is planned for the Navy, including a major effort on the Undersea Long Range Missile System (ULMS). The aircraft program of the Air Force is also expected to increase substantially for work on such programs as the B-1 advanced strategic bomber, the lightweight fighter prototype, and the F-15 air superiority fighter.

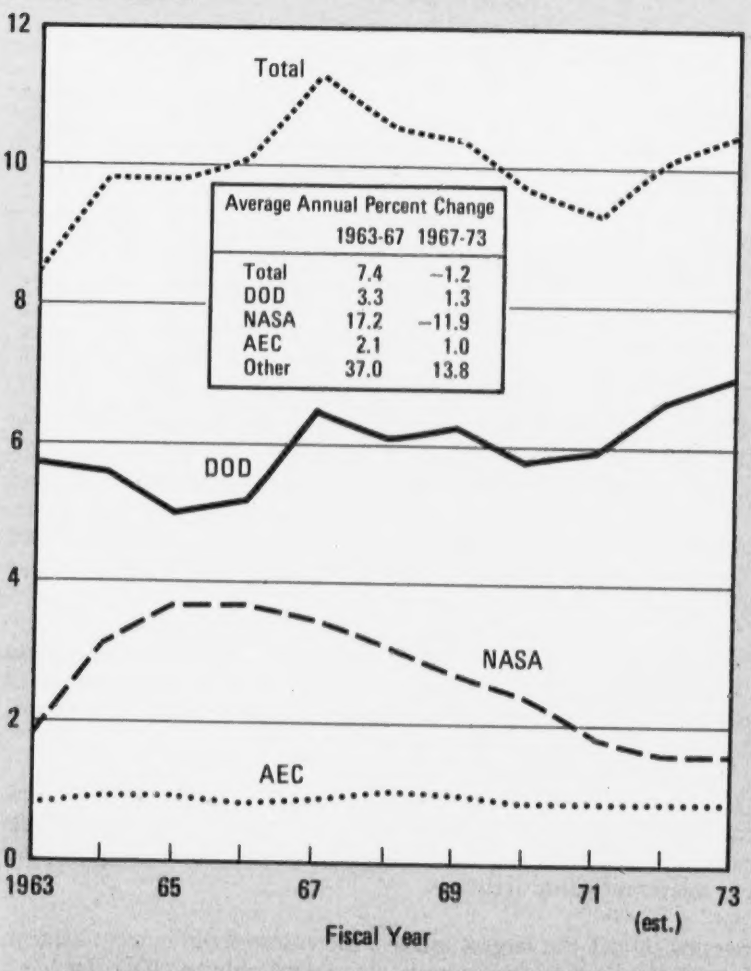
- Virtually no change occurs in the level of NASA's development program in 1973 since decreases in the Apollo program are offset by increases in development activities related to the post-Apollo manned flight programs, including Skylab and the space shuttle.

- The 1973 increase for AEC is mainly for acceleration of the development of an economic liquid-metal fast-breeder power reactor. Partially offsetting decreases are planned for the space propulsion reactor program and for nuclear weapons testing activities.

- HEW programs reflect the largest relative increases in the current period, and the actual increases for this agency are second only to DOD. They are primarily the result of expanded development programs of the National Cancer Institute.

- The decline in DOT development obligations is caused entirely by the cancellation of the SST.

Trends in Federal obligations for development by selected agencies



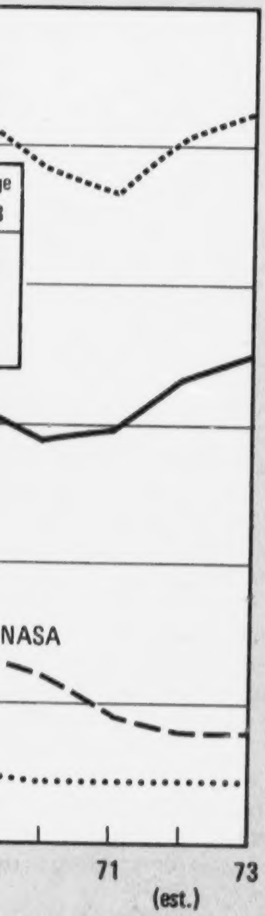
Average Annual Percent Change	1963-67	1967-73
Total	7.4	–1.2
DOD	3.3	1.3
NASA	17.2	–11.9
AEC	2.1	1.0
Other	37.0	13.8

SOURCE: National Science Foundation

Tr

- DOD, NASA, and AEC are expec the Federal development total i 1963.
- NASA's steady decline in develop net decrease in overall Federal ob and 1973. NASA's share of the percent in 1973 compared with its
- DOD shows an average annual gr period and 1 percent in the 19 development total dropped from 1967, but it is expected to be back
- AEC has maintained a fairly cons its share of the total has remained
- For the first time, in 1973 the co agencies is expected to be higher t among these other agencies are DO
- The joint share of the "other age in 1973 compared with 1 percent i

ment by selected agencies



Trends

- DOD, NASA, and AEC are expected to account jointly for 91 percent of the Federal development total in 1973, compared with 99 percent in 1963.

- NASA's steady decline in development support since 1966 has caused the net decrease in overall Federal obligations for development between 1967 and 1973. NASA's share of the Federal total is expected to be only 16 percent in 1973 compared with its peak of 38 percent in 1965.

- DOD shows an average annual growth rate of 3 percent in the 1963-67 period and 1 percent in the 1967-73 period. Its share of the Federal development total dropped from 67 percent in 1963 to 57 percent in 1967, but it is expected to be back to 67 percent in 1973.

- AEC has maintained a fairly constant level of development support, and its share of the total has remained around 9 percent.

- For the first time, in 1973 the combined development total of the other agencies is expected to be higher than that of AEC. The most noteworthy among these other agencies are DOT and HEW.

- The joint share of the "other agency" group is an anticipated 9 percent in 1973 compared with 1 percent in 1963.

Performers

The Federal development effort in the 1971-73 period is allocated to performing sectors as follows:

Federal obligations for development, by performer
[Dollars in millions]

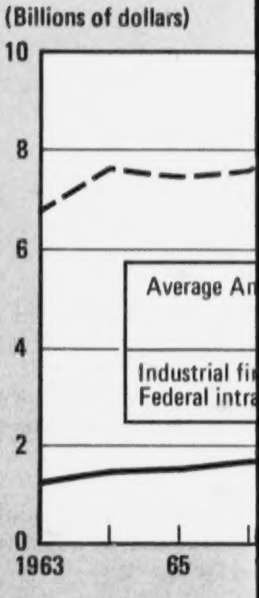
Performer	Actual 1971	Estimates 1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$9,399	$10,071	+ 7.2	$10,494	+ 4.2
Federal intramural	2,132	2,337	+ 9.6	2,325	– 0.5
Industrial firms[a]	6,408	6,854	+ 7.0	7,242	+ 5.7
Universities and colleges	149	158	+ 6.1	173	+ 9.5
FFRDC's administered by universities	330	341	+ 3.3	351	+ 3.0
Other nonprofit institutions[a]	329	295	–10.4	304	+ 2.9
Other performers	51	86	+69.8	100	+15.5

[a] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

- Since DOD accounts for approximately two-thirds of the total Federal development effort in the current period, its small decrease planned in intramural work and substantial increase in the use of industry in 1973 strongly influence the overall trend in Federal support of these performers.
- The combined effort of all performers other than industrial firms and Federal intramural is expected to account for less than 10 percent of the Federal development total in 1973.

- The industry share of the to
from 80 percent in 1963 to
the 1973 estimate of $7.2 b
billion in 1967.
- NASA was responsible for t
and DOD for the rise in 19
uous decline from 1967 to
- The ratio of Federal intramu
opment grew from 15 perc
1973. DOD has been the ma
intramural development perf

Trends in Federal dev



[a] Includes Federally F
(FFRDC's) administered

SOURCE: National Scie

n the 1971-73 period is allocated to

elopment, by performer

millions]

Actual	Estimates			
1971	1972	Percent change 1971-72	1973	Percent change 1972-73
$9,399	$10,071	+ 7.2	$10,494	+ 4.2
2,132	2,337	+ 9.6	2,325	– 0.5
6,408	6,854	+ 7.0	7,242	+ 5.7
149	158	+ 6.1	173	+ 9.5
330	341	+ 3.3	351	+ 3.0
329	295	–10.4	304	+ 2.9
51	86	+69.8	100	+15.5

RDC's) administered by this sector.

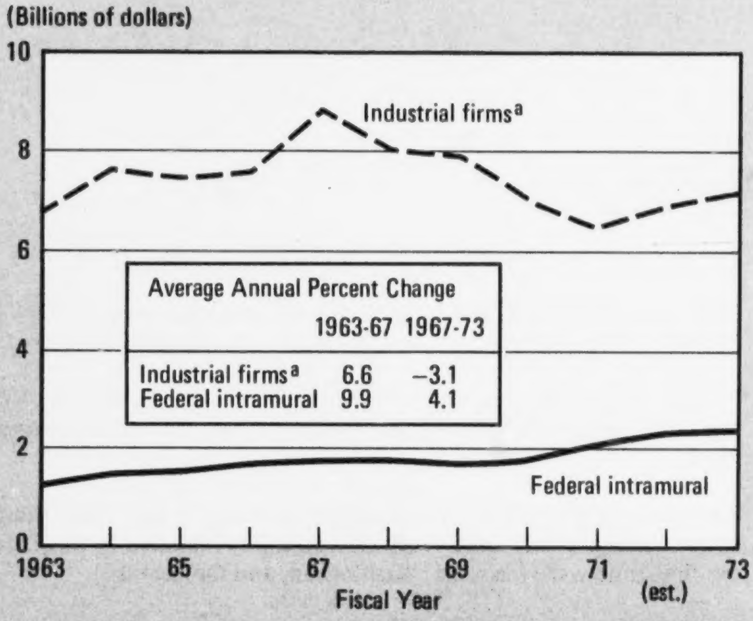
ately two-thirds of the total Federal period, its small decrease planned in crease in the use of industry in 1973 nd in Federal support of these per-

mers other than industrial firms and ccount for less than 10 percent of the

Trends

- The industry share of the total Federal development effort has decreased from 80 percent in 1963 to an estimated 69 percent in 1973. In dollars, the 1973 estimate of $7.2 billion is considerably below the peak of $8.8 billion in 1967.
- NASA was responsible for the rise in support for industrial firms in 1964 and DOD for the rise in 1967; both agencies contributed to the continuous decline from 1967 to 1971.
- The ratio of Federal intramural development work to total Federal development grew from 15 percent in 1963 to an estimated 22 percent in 1973. DOD has been the major influence in the generally rising support of intramural development performance.

Trends in Federal development obligations by major performer



Average Annual Percent Change

	1963-67	1967-73
Industrial firms[a]	6.6	–3.1
Federal intramural	9.9	4.1

[a]Includes Federally Funded Research and Development Centers (FFRDC's) administered by industrial firms.

SOURCE: National Science Foundation

Section 3. GEOGRAPHIC DISTRIBUTION

Data have been collected on the geographic distribution of Federal funds for research and development and R&D plant since 1963, but on an annual basis only since 1968.

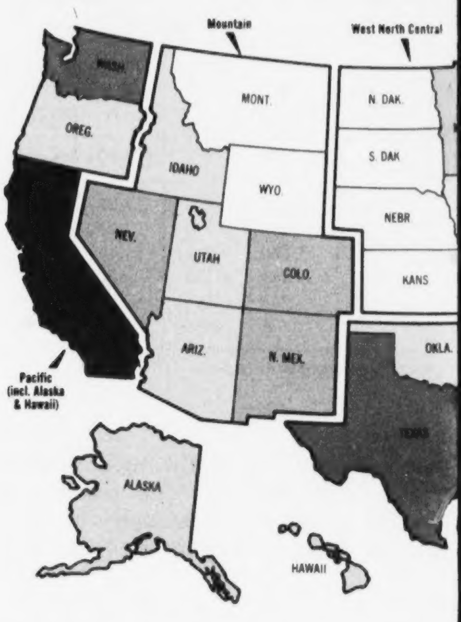
In 1971 the 11 agencies participating in the survey reported a total of $15.2 billion in R&D obligations, representing 98 percent of the Federal R&D total for that year. These agencies also reported R&D plant obligations of $586 million.

Data are given on a prime contract basis, although a sample survey was made of first-tier subcontracting in 1971. Indications are that the distribution of R&D support would show a significantly different pattern if subcontracting were taken into account.

SYNOPSIS

- California, Maryland, and New York each received more than $1 billion in Federal R&D obligations in 1971 for the second consecutive year.
- Despite declining support in recent years, the California R&D total remained above $3 billion, nearly three times that of Maryland or New York.
- Between 1970 and 1971 the number of States in the $500 million-to-$1 billion category increased from five to eight. Included in this category for the first time were Missouri, Washington, and Ohio.
- In 1971 eleven States received between $100 and $500 million, bringing the total receiving more than $100 million to 22 States. These 22 States accounted for 92 percent of the 1971 Federal R&D total.
- Seventeen States received R&D supp range.
- Only 12 States received less than $2 for 1 percent of the 1971 R&D total lowest amount received by any State

Distribution of total Federal R&D



SOURCE National Science Foundation

IIC DISTRIBUTION

:ollected on the geographic distribution of Fed-
search and development and R&D plant since
annual basis only since 1968.

agencies participating in the survey reported a
illion in R&D obligations, representing 98 per-
ral R&D total for that year. These agencies also
ant obligations of $586 million.

n a prime contract basis, although a sample sur-
first-tier subcontracting in 1971. Indications are
ion of R&D support would show a significantly
if subcontracting were taken into account.

ach received more than $1 billion in
for the second consecutive year.

years, the California R&D total
ee times that of Maryland or New

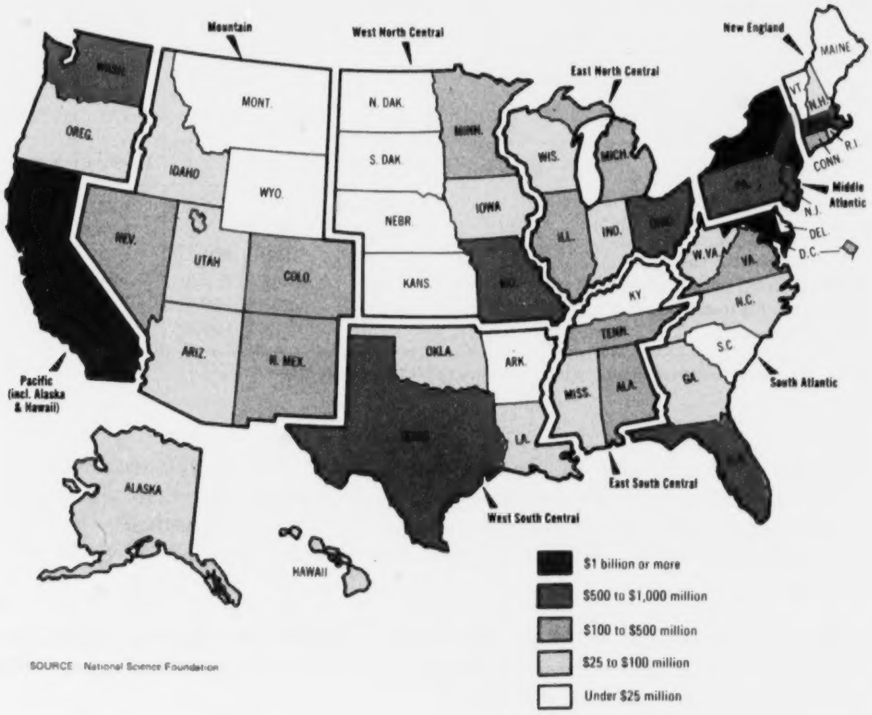
of States in the $500 million-to-$1
eight. Included in this category for
n, and Ohio.

n $100 and $500 million, bringing
llion to 22 States. These 22 States
Federal R&D total.

- Seventeen States received R&D support in the $25 million-to-$100 million range.

- Only 12 States received less than $25 million, and these accounted jointly for 1 percent of the 1971 R&D total. In this under-$25 million group, the lowest amount received by any State was $8 million.

Distribution of total Federal R&D obligations, by State, FY 1971


Mountain
West North Central
New England
East North Central
MAINE
VT.
N.H.
R.I.
CONN.
WASH.
OREG.
MONT.
N. DAK.
S. DAK.
NEBR.
KANS.
MINN.
WIS.
MICH.
IOWA
ILL.
IND.
OHIO
PA.
N.Y.
N.J.
Middle Atlantic
DEL.
D.C.
IDAHO
WYO.
NEV.
UTAH
COLO.
MO.
KY
W.VA.
VA.
N.C.
S.C.
TENN.
South Atlantic
CALIF.
ARIZ.
N. MEX.
OKLA.
ARK.
MISS.
ALA.
GA.
LA.
TEXAS
FLA.
Pacific (incl. Alaska & Hawaii)
ALASKA
HAWAII
West South Central
East South Central
■ $1 billion or more
▩ $500 to $1,000 million
▨ $100 to $500 million
░ $25 to $100 million
☐ Under $25 million

SOURCE: National Science Foundation

DISTRIBUTION BY DIVISION

Changes in the regional distribution of Federal R&D funds over the 1963-71 period are as follows:

Distribution of Federal R&D obligations by geographic division, fiscal years 1963, 1968, 1970, and 1971

Division	1963	1968	1970	1971
Total (millions of dollars)	$12,251	$15,690	$14,981	$15,240
	Percent distribution			
Pacific	38.1	30.4	29.4	26.3
South Atlantic	13.8	18.0	19.4	21.2
Middle Atlantic	14.6	15.7	16.8	15.8
New England	5.7	6.4	6.7	7.5
Mountain	8.7	7.0	7.6	7.4
East North Central	6.7	8.2	6.9	7.4
West North Central	3.1	2.0	3.2	5.2
West South Central	5.0	7.6	5.6	4.8
East South Central	3.4	4.2	4.0	4.1

NOTE: Percents do not add to 100 because outlying areas and offices abroad have been excluded.

- In each of the 6 years surveyed, the Pacific, South Atlantic, and Middle Atlantic divisions have received the most support. While the Pacific division had led throughout this period, since 1968 the South Atlantic has received more than the Middle Atlantic, because of growing R&D support to Maryland, Florida, and the District of Columbia.

- The Pacific division has sustained a substantial decline since 1963, both in relative and absolute terms. Its share of the Federal R&D total dropped from 38 percent in 1963 to 26 percent in 1971, and the net dollar decrease was 14 percent in that time. Changes in funding to California had most influence on this division.

- The South Atlantic division registered a substantial gain: from 14 percent of the Federal R&D total in 1963 to 21 percent in 1971 and an absolute increase of 91 percent.

- The Middle Atlantic division maintained about the same share of the R&D total throughout the 1963-71 period, around 16 percent, although its increase in absolute terms was 35 percent.

THE LEADING STATES

- Federal R&D funds are dist concentrate in a relatively sm 69 percent of the Federal R from 1963 through 1970 the accounted for 71 percent of th

- The same States have tended one year to another, and Calif made up the leading three. H land was in second place in third place.

- The "leading 10" States in 1 the first time. (The District o 9th and 10th places in 1970, tively, in 1971.)

Distribution of Federal R&D oblig in 1971 for fiscal ye

State
Total, all States (millions of dollars)
California
Maryland
New York
Florida
Massachusetts
New Jersey
Missouri
Texas
Washington
Pennsylvania
All other States[a]

[a]Includes outlying areas and offices abroad.

ION

bution of Federal R&D funds over the

D obligations by geographic division,
63, 1968, 1970, and 1971

	1963	. 1968	1970	1971
. . . .	$12,251	$15,690	$14,981	$15,240
	Percent distribution			
. . . .	38.1	30.4	29.4	26.3
. . . .	13.8	18.0	19.4	21.2
. . . .	14.6	15.7	16.8	15.8
. . . .	5.7	6.4	6.7	7.5
. . . .	8.7	7.0	7.6	7.4
. . . .	6.7	8.2	6.9	7.4
. . . .	3.1	2.0	3.2	5.2
. . . .	5.0	7.6	5.6	4.8
. . . .	3.4	4.2	4.0	4.1

d offices abroad have been excluded.

d, the Pacific, South Atlantic, and Middle
the most support. While the Pacific divi-
eriod, since 1968 the South Atlantic has
Atlantic, because of growing R&D support
strict of Columbia.

d a substantial decline since 1963, both in
share of the Federal R&D total dropped
26 percent in 1971, and the net dollar
time. Changes in funding to California had

stered a substantial gain: from 14 percent
63 to 21 percent in 1971 and an absolute

intained about the same share of the R&D
period, around 16 percent, although its
5 percent.

THE LEADING STATES

- Federal R&D funds are distributed to every State, but they tend to concentrate in a relatively small number. In 1971 10 States accounted for 69 percent of the Federal R&D total. It is worth noting, however, that from 1963 through 1970 the 10 most heavily supported States always accounted for 71 percent of the total.

- The same States have tended to appear in the "leading 10" group from one year to another, and California, Maryland, and New York have always made up the leading three. However, 1971 was the first year that Maryland was in second place in Federal R&D support and New York in third place.

- The "leading 10" States in 1971 included Missouri and Washington for the first time. (The District of Columbia and Ohio, which had been in 9th and 10th places in 1970, appeared in 12th and 11th places, respectively, in 1971.)

Distribution of Federal R&D obligations to the 10 States leading in such support in 1971 for fiscal years 1963, 1968, 1970, and 1971

State	1963	1968	1970	1971
Total, all States (millions of dollars)	$12,251	$15,690	$14,981	$15,240
	Percent distribution			
California	35.1	27.4	25.8	21.6
Maryland	5.5	5.8	7.1	7.9
New York	7.7	7.5	8.2	7.3
Florida	2.8	5.1	5.5	5.8
Massachusetts	4.2	5.1	5.1	5.8
New Jersey	3.3	4.3	5.0	4.9
Missouri	1.9	.8	1.9	3.9
Texas	3.2	5.6	4.3	3.9
Washington	2.7	2.2	2.8	3.7
Pennsylvania	3.6	3.9	3.6	3.6
All other States[a]	30.0	32.3	30.7	31.6

[a] Includes outlying areas and offices abroad.

R&D obligations by geographic division and State, fiscal years 1963, 1968, 1970, and 1971

[Dollars in millions]

Division and State	1963	1968	1970	Net increase/ decrease 1963-70	1971	Net increase/ decrease 1970-71
Pacific	$4,665.2	$4,774.3	$4,404.1	–$261.1	$4,004.9	–$399.2
Alaska	12.1	61.8	43.2	+ 31.1	58.2	+ 15.0
California	4,296.7	4,298.6	3,871.1	– 425.6	3,295.4	– 575.7
Hawaii	7.1	35.0	43.8	+ 36.7	38.3	– 5.5
Oregon	18.2	35.0	33.8	+ 15.6	41.9	+ 8.1
Washington	331.1	343.9	412.2	+ 81.1	571.2	+ 159.0
South Atlantic	$1,685.3	$2,819.7	$2,899.2	+$1,213.9	$3,224.6	+$325.4
Delaware	24.6	13.9	16.3	– 8.3	13.0	– 3.3
District of Columbia	403.9	443.2	468.5	+ 64.6	478.2	+ 9.7
Florida	340.9	799.1	824.8	+ 483.9	890.4	+ 65.6
Georgia	26.7	280.7	72.3	+ 45.6	78.8	+ 6.5
Maryland	675.7	905.9	1,063.4	+ 387.7	1,201.2	+ 137.8
North Carolina	27.0	62.4	63.9	+ 36.9	82.7	+ 18.8
South Carolina	19.8	18.7	17.8	– 2.0	23.4	+ 5.6
Virginia	158.8	275.2	352.7	+ 193.9	424.9	+ 72.2
West Virginia	7.9	20.6	19.6	+ 11.7	32.1	+ 12.5
Middle Atlantic	$1,789.2	$2,473.4	$2,516.9	+$727.7	$2,413.5	–$103.4
New Jersey	410.1	681.8	742.5	+ 332.4	745.1	+ 2.6
New York	944.2	1,174.9	1,235.6	+ 291.4	1,119.5	– 116.1
Pennsylvania	434.9	616.7	538.8	+ 103.9	548.9	+ 10.1
New England	$ 702.2	$1,009.4	$1,000.8	+$298.6	$1,148.8	+$148.0
Connecticut	139.3	133.2	160.0	+ 20.7	149.9	– 10.1
Maine	5.3	6.0	13.3	+ 8.0	13.6	+ .3
Massachusetts	515.1	795.7	760.9	+ 245.8	887.0	+ 126.1
New Hampshire	16.9	36.6	27.3	+ 10.4	34.0	+ 6.7
Rhode Island	20.5	31.1	29.9	+ 9.4	50.5	+ 20.6
Vermont	5.2	6.8	9.5	+ 4.3	13.7	+ 4.2
Mountain	$1,068.6	$1,093.6	$1,136.8	+$ 68.2	$1,127.4	–$ 9.4
Arizona	174.6	71.4	72.8	– 101.8	88.7	+ 15.9
Colorado	240.8	265.3	274.1	+ 33.3	264.2	– 9.9
Idaho	29.7	65.6	75.0	+ 45.3	75.3	+ .3
Mountain (cont.)						
Montana	8.5	8.3				
Nevada	128.9	223.6				
New Mexico	345.9	413.3				
Utah	135.8	39.7				
Wyoming	4.5	6.4				
East North Central	$ 819.5	$1,294.0				
Illinois	203.9	239.3				
Indiana	57.3	82.9				
Michigan	154.4	203.4				
Ohio	304.3	653.6				
Wisconsin	99.7	114.8				
West North Central	$ 376.7	$ 321.1				
Iowa	23.3	41.7				
Kansas	21.5	19.8				
Minnesota	73.6	111.1				
Missouri	236.6	121.1				
Nebraska	4.8	15.4				
North Dakota	3.4	6.0				
South Dakota	13.5	6.0				
West South Central	$ 608.2	$1,188.9				
Arkansas	4.2	8.1				
Louisiana	189.2	272.4				
Oklahoma	16.9	24.0				
Texas	397.9	884.4				
East South Central	$ 420.1	$ 655.3				
Alabama	246.8	405.7				
Kentucky	11.0	24.1				
Mississippi	16.5	26.5				
Tennessee	145.8	199.1				

1970	Net increase/ decrease 1963-70	1971	Net increase/ decrease 1970-71
$4,404.1	–$261.1	$4,004.9	–$399.2
43.2	+ 31.1	58.2	+ 15.0
3,871.1	– 425.6	3,295.4	– 575.7
43.8	+ 36.7	38.3	– 5.5
33.8	+ 15.6	41.9	+ 8.1
412.2	+ 81.1	571.2	+ 159.0
$2,899.2	+$1,213.9	$3,224.6	+$325.4
16.3	– 8.3	13.0	– 3.3
468.5	+ 64.6	478.2	+ 9.7
824.8	+ 483.9	890.4	+ 65.6
72.3	+ 45.6	78.8	+ 6.5
1,063.4	+ 387.7	1,201.2	+ 137.8
63.9	+ 36.9	82.7	+ 18.8
17.8	– 2.0	23.4	+ 5.6
352.7	+ 193.9	424.9	+ 72.2
19.6	+ 11.7	32.1	+ 12.5
$2,516.9	+$727.7	$2,413.5	–$103.4
742.5	+ 332.4	745.1	+ 2.6
1,235.6	+ 291.4	1,119.5	– 116.1
538.8	+ 103.9	548.9	+ 10.1
$1,000.8	+$298.6	$1,148.8	+$148.0
160.0	+ 20.7	149.9	– 10.1
13.3	+ 8.0	13.6	+ .3
760.9	+ 245.8	887.0	+ 126.1
27.3	+ 10.4	34.0	+ 6.7
29.9	+ 9.4	50.5	+ 20.6
9.5	+ 4.3	13.7	+ 4.2
$1,136.8	+$ 68.2	$1,127.4	–$ 9.4
72.8	– 101.8	88.7	+ 15.9
274.1	+ 33.3	264.2	– 9.9
75.0	+ 45.3	75.3	+ .3

R&D obligations by geographic division and State, fiscal years 1963, 1968, 1970, and 1971

[Dollars in millions]

Division and State	1963	1968	1970	Net increase/ decrease 1963-70	1971	Net increase/ decrease 1970-71
Mountain (cont.)						
Montana	8.5	8.3	11.6	+ 3.1	17.6	+ 6.0
Nevada	128.9	223.6	190.9	+ 62.0	159.0	– 31.9
New Mexico	345.9	413.3	444.1	+ 98.2	458.7	+ 14.6
Utah	135.8	39.7	61.1	– 74.7	55.8	– 5.3
Wyoming	4.5	6.4	7.2	+ 2.7	8.1	+ .9
East North Central . .	$ 819.5	$1,294.0	$1,038.8	+$219.3	$1,121.7	+$ 82.9
Illinois	203.9	239.3	239.6	+ 35.7	249.1	+ 9.5
Indiana	57.3	82.9	91.9	+ 34.6	74.6	– 17.3
Michigan	154.4	203.4	162.8	+ 8.4	187.3	+ 24.5
Ohio	304.3	653.6	457.3	+ 153.0	518.1	+ 60.8
Wisconsin	99.7	114.8	87.1	– 12.6	92.6	+ 5.5
West North Central . .	$ 376.7	$ 321.1	$ 475.4	+$ 98.7	$ 786.0	+$310.6
Iowa	23.3	41.7	32.7	+ 9.4	32.9	+ .2
Kansas	21.5	19.8	16.6	– 4.9	24.3	+ 7.7
Minnesota	73.6	111.1	109.3	+ 35.7	102.8	– 6.5
Missouri	236.6	121.1	291.2	+ 54.6	596.9	+ 305.7
Nebraska	4.8	15.4	10.6	+ 5.8	10.4	– .2
North Dakota	3.4	6.0	8.9	+ 5.5	9.1	+ .2
South Dakota	13.5	6.0	6.1	– 7.4	9.6	+ 3.5
West South Central . .	$ 608.2	$1,188.9	$ 834.9	+$226.7	$ 733.1	–$101.8
Arkansas	4.2	8.1	9.8	+ 5.6	20.8	+ 11.0
Louisiana	189.2	272.4	146.5	– 42.7	90.1	– 56.4
Oklahoma	16.9	24.0	29.5	+ 12.6	26.3	– 3.2
Texas	397.9	884.4	649.1	+ 251.2	595.9	– 53.2
East South Central . .	$ 420.1	$ 655.3	$ 599.7	+$179.6	$ 618.2	+$ 18.5
Alabama	246.8	405.7	357.2	+ 110.4	360.0	+ 2.8
Kentucky	11.0	24.1	20.4	+ 9.4	23.0	+ 2.6
Mississippi	16.5	26.5	28.3	+ 11.8	46.7	+ 18.4
Tennessee	145.8	199.1	193.8	+ 48.0	188.5	– 5.3

- Eight States – California, Maryland, New York, Florida, Massachusetts, New Jersey, Texas, and Pennsylvania – have been among the 10 States leading in Federal R&D support in each of the six years surveyed (1963, 1965, 1968, 1969, 1970, and 1971).

- New Mexico, among the leading 10 States through 1965, moved to 11th place by 1968 and remained in that position until 1971.

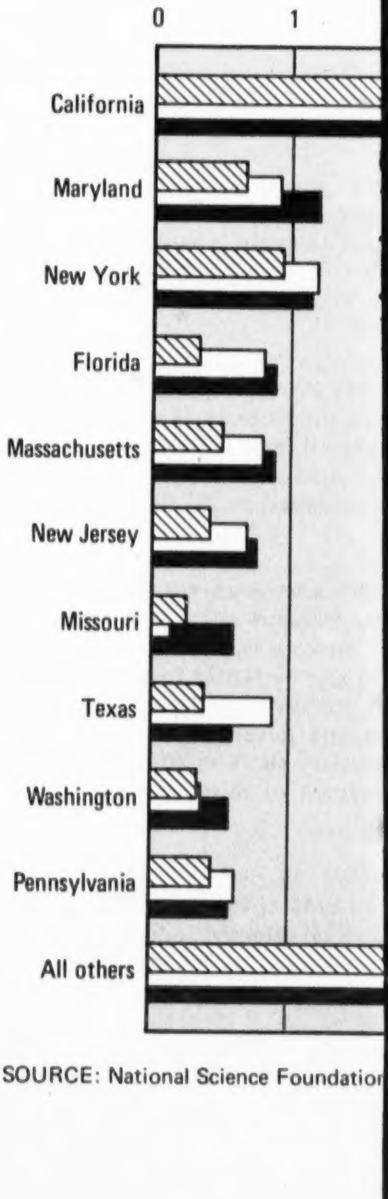
- Federal R&D support to California dropped to $3.3 billion in 1971 from a high of $4.6 billion in 1965. The greatest decrease occurred between 1970 and 1971 because of substantial funding cutbacks on the part of NASA and DOD – 37 percent and 11 percent, respectively – which brought about further retrenchment in the defense and space industries. However, the university and college sector and the "other nonprofit" sector received increased support in 1971 in California as a result of increased R&D funding on the part of most of the other agencies.

- Maryland is the leading State for Federal intramural R&D performance, accounting for 18 percent of the total in 1971. Maryland was the only one of the 10 leading States in 1971 where intramural work predominated. Included among the important Federal installations in Maryland are HEW's National Institutes of Health, NASA's Goddard Space Flight Center, Commerce's National Bureau of Standards, the Naval Ordnance Laboratory, and the Army's Edgewood Arsenal Laboratories. Industrial resources, however, also figure significantly in Federal R&D work in this State.

- New York's 1971 decrease of $116 million was the second largest (after California) among all the States. It brought the New York level of R&D support to a point below that of 1968. Virtually all of the New York decline is attributable to completion of the Apollo program. The impact of NASA's reduced support was felt primarily within the industry sector, which reflected an 18-percent decline in Federal R&D support from 1970 to 1971. However, other sectors showed higher R&D support levels.

- The rapid rise of Federal R&D funds to Florida between 1963 and 1969 depended on the growth of defense- and space-related activities. After a slight drop in 1970, the total in 1971 rose somewhat above the former high. The 1970 drop reflected the phaseout or completion of major space programs. The 1971 increase of 8 percent, or $66 million, was mainly the net result of a $111 million increase in DOD funds and a $53 million decline in NASA support.

Federal R&D support to the
for FY 1963, 1968, and 197



SOURCE: National Science Foundatio

l, New York, Florida, Massachusetts,
ia – have been among the 10 States
each of the six years surveyed (1963,

States through 1965, moved to 11th
position until 1971.

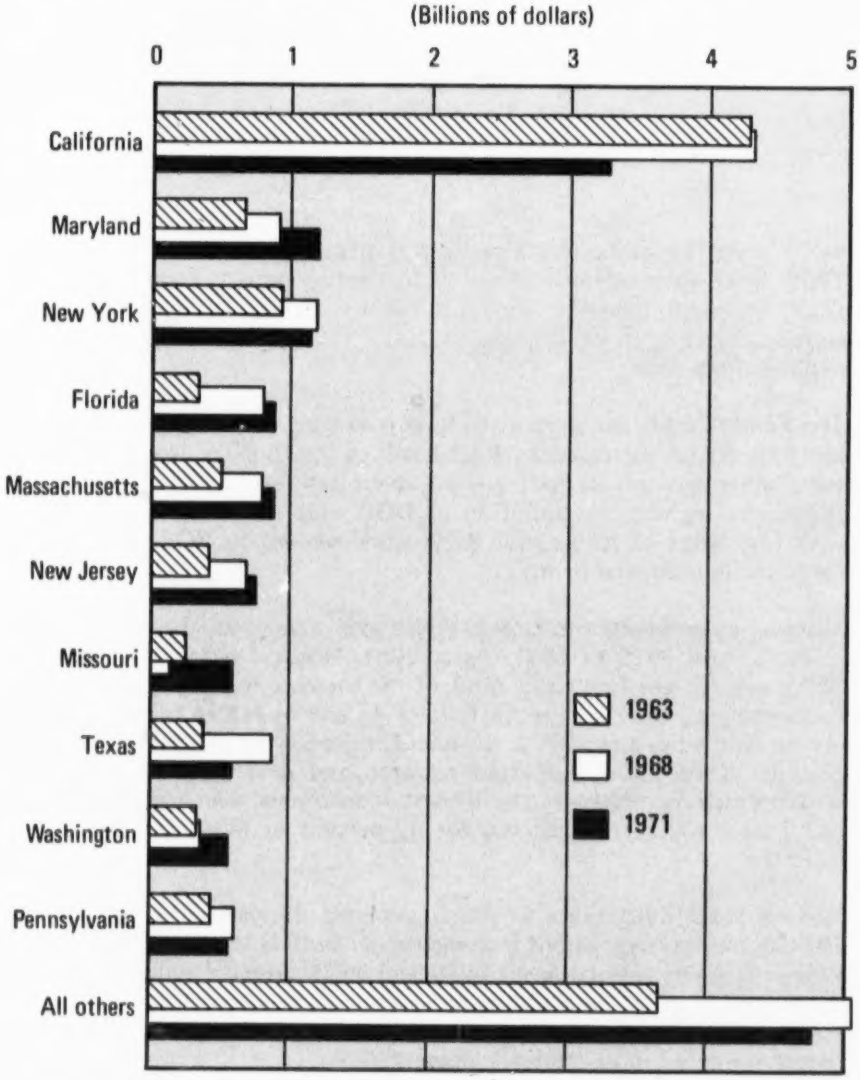
ropped to $3.3 billion in 1971 from a
atest decrease occurred between 1970
nding cutbacks on the part of NASA
rcent, respectively – which brought
efense and space industries. However,
the "other nonprofit" sector received
nia as a result of increased R&D fund-
gencies.

ederal intramural R&D performance,
l in 1971. Maryland was the only one
here intramural work predominated.
deral installations in Maryland are
, NASA's Goddard Space Flight Cen-
Standards, the Naval Ordnance Labo-
Arsenal Laboratories. Industrial re-
ificantly in Federal R&D work in

million was the second largest (after
brought the New York level of R&D
968. Virtually all of the New York
of the Apollo program. The impact
primarily within the industry sector,
e in Federal R&D support from 1970
showed higher R&D support levels.

s to Florida between 1963 and 1969
- and space-related activities. After a
71 rose somewhat above the former
haseout or completion of major space
rcent, or $66 million, was mainly the
e in DOD funds and a $53 million

Federal R&D support to the 10 States leading in such support in 1971 for FY 1963, 1968, and 1971



SOURCE: National Science Foundation

- In 1971 R&D funding to Massachusetts increased for the first time since 1968. More than one-half of the $126 million increase was obligated by DOT. Although industrial firms received a sizable proportion of the DOT increase, most of it was directed to DOT's Transportation Systems Center in Cambridge, Mass.

- The Federal R&D net support to New Jersey scarcely changed from 1970 to 1971. NASA increased its R&D funds to the State by 41 percent while some other agencies, including DOD, decreased their support. New Jersey shows the highest concentration of DOD support among all the States with four-fifths of its Federal R&D work funded by DOD, mostly concentrated in industrial firms.

- Missouri experienced the largest dollar gain among all the States ($306 million) from 1970 to 1971. As a result, Missouri entered the "leading 10" group for the first time. Most of the increase was provided by DOD for continuing work on the Air Force F-15 and by NASA for work on the orbital workshop and airlock modules for the Skylab program. Almost 90 percent of federally supported research and development in Missouri is performed by industry, the highest industry share in any State. DOD and NASA together accounted for 92 percent of Missouri's R&D total in 1971.

- Federal R&D obligations to Texas declined 33 percent from 1968 to 1971 because of reductions in programs of both NASA and DOD. DOD's $25 million decrease between 1970 and 1971 affected industry but not other sectors, all of which received increased DOD support. However, all R&D performing sectors reflected decreased NASA funding, although industry was the most seriously affected.

- Although Washington ranked among the 10 Federal R&D support leaders in 1971, the cancellation of the SST development program is expected to lead to reduced funding in subsequent years.

- Throughout the 1963-71 period th
R&D total has remained fairly con
support between 1968 and 1970,
1971. Other agencies increased R&
DOD funds. Increases were evident
large increase on the part of NA
cutback. NASA's R&D support in
tween 1970 and 1971 to suppor
Earth Resources Technology Satellit

- Among three other States with si
Federal R&D support they received
whose 1971 R&D funding level re
that of 1970, or 20 percent. Th
expanded support for intramural r
of DOD and NASA. In 1971 the in
cent of Virginia's Federal R&D fu
the States.

- Ohio also registered an importan
almost $61 million. Two agencies,
most of the rise. However, 1971 wa
in which Ohio did not rank among t

- Louisiana has shown a drop in R&
period. The 1971 decrease of $56
support to less than one-fourth th
industry for work on the Apollo pr
result of these decreases, Louisiana
24th in 1971.

s increased for the first time since
million increase was obligated by
d a sizable proportion of the DOT
T's Transportation Systems Center

Jersey scarcely changed from 1970
ls to the State by 41 percent while
ecreased their support. New Jersey
OD support among all the States
ork funded by DOD, mostly con-

gain among all the States ($306
ult, Missouri entered the "leading
he increase was provided by DOD
-15 and by NASA for work on the
or the Skylab program. Almost 90
ch and development in Missouri
industry share in any State. DOD
percent of Missouri's R&D total

clined 33 percent from 1968 to
s of both NASA and DOD. DOD's
d 1971 affected industry but not
eased DOD support. However, all
creased NASA funding, although
.

e 10 Federal R&D support leaders
velopment program is expected to
ears.

- Throughout the 1963-71 period the share of Pennsylvania in the Federal R&D total has remained fairly constant. After a sizable decline in R&D support between 1968 and 1970, Pennsylvania showed a small gain in 1971. Other agencies increased R&D support enough to offset the loss of DOD funds. Increases were evident in each sector except industry where a large increase on the part of NASA did not counterbalance the DOD cutback. NASA's R&D support in Pennsylvania more than doubled between 1970 and 1971 to support research and development on the Earth Resources Technology Satellite (ERTS).

- Among three other States with significant changes in the amounts of Federal R&D support they received between 1970 and 1971 was Virginia, whose 1971 R&D funding level represented a $72 million increase over that of 1970, or 20 percent. This growth was largely the result of expanded support for intramural research and development on the part of DOD and NASA. In 1971 the intramural sector accounted for 63 percent of Virginia's Federal R&D funds, the largest proportion among all the States.

- Ohio also registered an important increase between 1970 and 1971, almost $61 million. Two agencies, DOD and DOT, were responsible for most of the rise. However, 1971 was the only year surveyed except 1963 in which Ohio did not rank among the leading 10 States.

- Louisiana has shown a drop in R&D funds in each year of the 1968-71 period. The 1971 decrease of $56 million brought Louisiana's level of support to less than one-fourth that of 1965 when NASA funding to industry for work on the Apollo program was highest in this State. As a result of these decreases, Louisiana moved from 11th place in 1965 to 24th in 1971.

DISTRIBUTION OF FUNDS BY AGENCY

- The overall Government distribution pattern is primarily influenced by DOD. In 1971 this agency provided the predominant support in each of the 10 leading States except Texas, where NASA provided the major support. Also, eight of the 10 States leading in DOD support were among the leading 10 in total Federal R&D support.

- For NASA and HEW, second and third in total R&D funds, six of their own leading States, respectively, were also among the leading 10 overall.

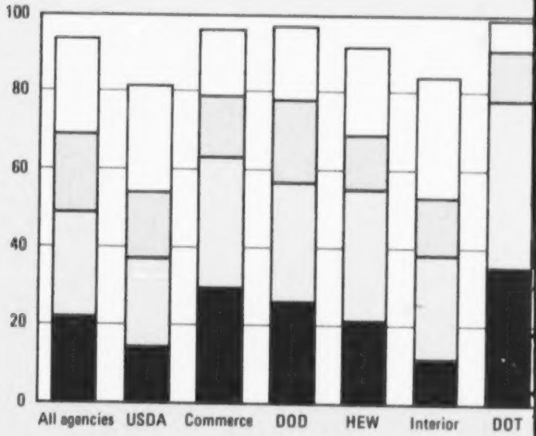
- However, for AEC, fourth in size of funding, only four of its leading 10 States were among the 10 total Federal R&D leaders.

- DOT and NSF, fifth and sixth agencies in R&D obligations in 1971, each numbered six of their own "leading 10" States among the 10 Federal R&D support leaders.

- Thus, the individual patterns of the primary R&D support agencies (with the exception of AEC) tend to overlap and to concentrate funds in 10 to 15 States.

- Federal agencies distribute R&D support to the States in varying concentration patterns. Five agencies – AEC, DOT, NASA, Commerce, and DOD – direct at least four-fifths of their R&D dollars in each case to 10 States. HEW and OEO, on the other hand, concentrate less intensively; slightly more than two-thirds of their R&D funds were placed in 10 States, respectively. For EPA and NSF, the concentration is around three-fifths; and for USDA and Interior, closer to one-half, since their missions tend to be oriented to work concerned with natural conditions.

R&D obligations of each agency to the 25 State

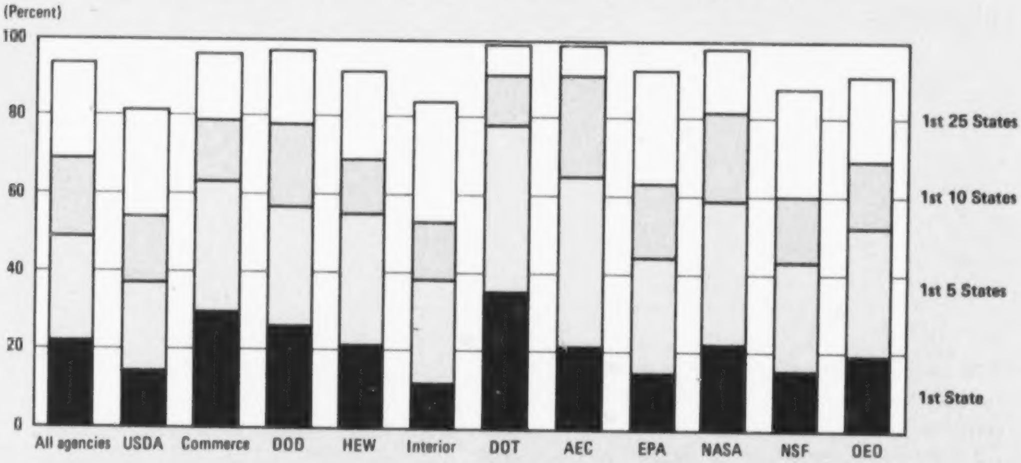


State rank for the 10 States leading in Federal R&D

State	All agencies	USDA	Commerce	DOD
Total R&D (Millions of dollars)	$15,240	$300	$143	$7,498
California	1	3	6	1
Maryland	2	1	1	5
New York	3		10	2
Florida	4		8	6
Massachusetts	5		7	4
New Jersey	6		4	3
Missouri	7			7
Texas	8	7	9	
Washington	9		5	9
Pennsylvania	10	8		
Ohio				8
D.C.		2		10
New Mexico				
Virginia				
Alabama				
Colorado			2	
Illinois		6		
Tennessee				
Michigan				
Nevada				
Wisconsin		10		
Louisiana		4		
Arizona				
North Carolina				
Georgia		5		
Idaho				
Alaska			3	
Mississippi		9		
West Virginia				
Kentucky				
South Dakota				

SOURCE: National Science Foundation

R&D obligations of each agency to the 25 States leading in such support, FY 1971



State rank for the 10 States leading in Federal R&D support, overall and by agency, FY 1971

State	All agencies	USDA	Commerce	DOD	HEW	Interior	DOT	AEC	EPA	NASA	NSF	OEO
Total R&D (Millions of dollars)	$15,240	$300	$143	$7,498	$1,441	$194	$482	$1,302	$134	$3,256	$336	$153
California	1	3	6	1	2	2	4	1	2	1	1	3
Maryland	2	1	1	5	1	5	9			4	10	8
New York	3		10	2	3		7	3	8	7	2	1
Florida	4		8	6						2	9	
Massachusetts	5		7	4	4		2		6		3	7
New Jersey	6		4	3		7			10			
Missouri	7			7						6		
Texas	8	7	9		7		6			3		
Washington	9		5	9		10	1	9				
Pennsylvania	10	8			5	1		5	4		5	
Ohio				8	9		3		5	10		10
D.C.		2		10	8	4	5		7		8	2
New Mexico								2				
Virginia						9	10		3	8		
Alabama										5		
Colorado			2			3	8			9	4	
Illinois		6			6			7			6	5
Tennessee								6	9			
Michigan											7	
Nevada								4				
Wisconsin		10										4
Louisiana		4										
Arizona												6
North Carolina					10							
Georgia		5										
Idaho								8				
Alaska			3					10				
Mississippi		9										
West Virginia						6						
Kentucky												9
South Dakota						8						

SOURCE: National Science Foundation

FACTORS IN R&D PERFORMING STRENGTH

- The overall State distribution pattern is largely determined by the industrial R&D support pattern, since the industry sector accounted for more than one-half of total 1971 Federal R&D obligations. The 10 leading States in Federal R&D support to industrial firms were also the 10 leading States in overall Federal R&D support.

- The university and college sector reflects greater dispersion of funds. For example, the 10 leading States in Federal R&D support to universities and colleges received 62 percent of the Federal support to that sector, compared with the 78 percent of Federal support directed to the 10 leading States to receive industry support in 1971. This pattern also compares with the 78 percent ratio for R&D support to intramural performers given to the 10 States leading in that performance category.

- R&D obligations can be ranked by State and compared with such measures of national activity as population, total personal income, and total Federal taxes. Although no direct cause and effect conclusions can be drawn, the data tend to indicate that the wider choice of skills and institutions found in more populous and wealth-producing areas is related to the selection of given States for R&D performance.

The 10 States leading in Federal R&D obligations in fiscal year 1971 com
States in Federal R&D support of perfo

States leading in Federal R&D support	Percent of total Federal R&D support	Position among all States in		
		Federal intramural	Industrial firms[a]	Univer and col
1. California	21.6	2	1	1
2. Maryland	7.9	1	9	9
3. New York	7.3	13	2	2
4. Florida	5.8	3	5	14
5. Massachusetts	5.8	9	7	3
6. New Jersey	4.9	11	3	19
7. Missouri	3.9	21	4	13
8. Texas	3.9	8	8	6
9. Washington	3.7	26	6	12
10. Pennsylvania	3.6	12	10	5
All other States	31.6	—	—	—

[a] Includes Federally Funded Research and Development Centers administered by this sector.

MING

rn is large-
D support
accounted
71 Federal
States in
firms were
ll Federal

r reflects
mple, the
upport to
2 percent
tor, com-
al support
to receive
ttern also
for R&D
ven to the
ance cate-

State and
national
l income,
no direct
be drawn,
the wider
d in more
areas is
States for

The 10 States leading in Federal R&D obligations in fiscal year 1971 compared with their relative positions among all States in Federal R&D support of performer groups

States leading in Federal R&D support	Percent of total Federal R&D support	Position among all States in Federal R&D support of performer groups					
		Federal intramural	Industrial firms[a]	Universities and colleges	FFRDC's administered by universities	Other nonprofit institutions[a]	Other
1. California	21.6	2	1	1	1	1	1
2. Maryland	7.9	1	9	9	5	10	9
3. New York	7.3	13	2	2	6	2	2
4. Florida	5.8	3	5	14	–	38	20
5. Massachusetts	5.8	9	7	3	4	3	7
6. New Jersey	4.9	11	3	19	9	18	14
7. Missouri	3.9	21	4	13	–	12	12
8. Texas	3.9	8	8	6	19	11	5
9. Washington	3.7	26	6	12	16	9	6
10. Pennsylvania	3.6	12	10	5	10	8	3
All other States	31.6	–	–	–	–	–	–

[a] Includes Federally Funded Research and Development Centers administered by this sector.

Distribution of Federal R&D obligations by State compared with other national indicators, b

State	Total Federal R&D obligations		Population		Total personal income		Total Federal taxes[a]	
	Rank	Percent of total	Rank	Percent of total	Rank	Percent of total	Rank	Percent of total
United States total, (in millions)	$15,240		[b]206		$854		$172,842	
California	1	21.62	1	9.81	1	11.08	2	8.68
Maryland	2	7.88	17	1.94	14	2.12	11	2.67
New York	3	7.35	2	8.92	2	10.82	1	16.26
Florida	4	5.84	9	3.41	9	3.17	13	2.26
Massachusetts	5	5.82	10	2.79	10	3.09	9	2.89
New Jersey	6	4.89	8	3.54	8	4.13	8	3.80
Missouri	7	3.92	13	2.30	12	2.16	10	2.68
Texas	8	3.91	4	5.56	6	4.94	7	4.62
Washington	9	3.75	22	1.67	20	1.67	22	1.21
Pennsylvania	10	3.60	3	5.76	4	5.74	5	6.11
Ohio	11	3.40	6	5.23	5	5.25	6	5.97
District of Columbia	12	3.14	42	.36	36	.52	c	c
New Mexico	13	3.01	37	.50	40	.41	44	.21
Virginia	14	2.79	14	2.29	13	2.14	19	1.58
Alabama	15	2.36	21	1.69	25	1.24	27	.76
Colorado	16	1.73	28	1.11	26	1.09	20	1.47
Illinois	17	1.63	5	5.43	3	6.26	3	7.61
Tennessee	18	1.24	18	1.93	21	1.55	23	1.04
Michigan	19	1.23	7	4.36	7	4.55	4	6.18
Nevada	20	1.04	48	.25	45	.29	43	.21
Connecticut	21	.98	24	1.49	18	1.82	15	2.05
Minnesota	22	.68	19	1.88	19	1.81	16	1.85
Wisconsin	23	.61	16	2.17	16	2.03	17	1.77
Louisiana	24	.59	20	1.78	22	1.40	25	.91
Arizona	25	.58	33	.90	31	.84	33	.49

State	Total Federal R&D obligations	
	Rank	Percent of total
North Carolina	26	.54
Georgia	27	.52
Idaho	28	.49
Indiana	29	.49
Alaska	30	.38
Utah	31	.37
Rhode Island	32	.33
Mississippi	33	.31
Oregon	34	.28
Hawaii	35	.25
New Hampshire	36	.22
Iowa	37	.22
West Virginia	38	.21
Oklahoma	39	.17
Kansas	40	.16
South Carolina	41	.15
Kentucky	42	.15
Arkansas	43	.14
Montana	44	.12
Vermont	45	.09
Maine	46	.09
Delaware	47	.09
Nebraska	48	.07
South Dakota	49	.06
North Dakota	50	.06
Wyoming	51	.05
Outlying areas and offices abroad		.40

---

[a] Includes individual income and employment taxes, corporation, excise, estate, and gift taxes (minus refunds).
[b] Includes persons stationed in the armed forces in each area.
[c] Included in Maryland tax figures.
[d] Collections from and refunds to U.S. taxpayers in Puerto Rico, Canal Zone, and in foreign countries.

SOURCES: U.S. Department of Commerce, *Popular*
Department of Commerce, Office of Business Economic
of the Treasury, *Statistical Appendix to Annual Repor*
Year Ended June 30, 1971.

Distribution of Federal R&D obligations by State compared with other national indicators, by State, 1971

Population	Total personal income		Total Federal taxes[a]	
Percent of total	Rank	Percent of total	Rank	Percent of total
[b]206	$854		$172,842	
9.81	1	11.08	2	8.68
1.94	14	2.12	11	2.67
8.92	2	10.82	1	16.26
3.41	9	3.17	13	2.26
2.79	10	3.09	9	2.89
3.54	8	4.13	8	3.80
2.30	12	2.16	10	2.68
5.56	6	4.94	7	4.62
1.67	20	1.67	22	1.21
5.76	4	5.74	5	6.11
5.23	5	5.25	6	5.97
.36	36	.52	c	c
.50	40	.41	44	.21
2.29	13	2.14	19	1.58
1.69	25	1.24	27	.76
1.11	26	1.09	20	1.47
5.43	3	6.26	3	7.61
1.93	21	1.55	23	1.04
4.36	7	4.55	4	6.18
.25	45	.29	43	.21
1.49	18	1.82	15	2.05
1.88	19	1.81	16	1.85
2.17	16	2.03	17	1.77
1.78	22	1.40	25	.91
.90	31	.84	33	.49

State	Total Federal R&D obligations		Population		Total personal income		Total Federal taxes[a]	
	Rank	Percent of total	Rank	Percent of total	Rank	Percent of total	Rank	Percent of total
North Carolina . . .	26	.54	12	2.49	15	2.04	12	2.34
Georgia	27	.52	15	2.26	17	1.94	18	1.62
Idaho	28	.49	43	.35	44	.29	41	.25
Indiana	29	.49	11	2.56	11	2.45	14	2.06
Alaska	30	.38	51	.15	50	.17	49	.09
Utah	31	.37	36	.53	39	.44	39	.25
Rhode Island	32	.33	39	.47	37	.46	34	.45
Mississippi	33	.31	30	1.08	32	.72	37	.34
Oregon	34	.28	31	1.05	29	.99	28	.68
Hawaii	35	.25	40	.38	38	.44	38	.31
New Hampshire . . .	36	.22	41	.37	42	.33	42	.24
Iowa	37	.22	25	1.38	23	1.30	26	.81
West Virginia	38	.21	34	.85	35	.66	35	.37
Oklahoma	39	.17	27	1.27	28	1.07	24	.97
Kansas	40	.16	29	1.09	27	1.08	29	.66
South Carolina . . .	41	.15	26	1.27	30	.97	32	.55
Kentucky	42	.15	23	1.59	24	1.26	21	1.47
Arkansas	43	.14	32	.94	34	.69	36	.34
Montana	44	.12	44	.34	46	.29	45	.15
Vermont	45	.09	49	.22	49	.19	48	.11
Maine	46	.09	38	.49	41	.40	40	.25
Delaware	47	.09	47	.27	43	.30	30	.63
Nebraska	48	.07	35	.73	33	.71	31	.61
South Dakota	49	.06	45	.32	47	.27	47	.12
North Dakota	50	.06	46	.30	48	.25	46	.13
Wyoming	51	.05	50	.16	51	.15	50	.09
Outlying areas and offices abroad. . . .		.40	—	—	—	—	—	[d].84

ation, excise, estate, and gift taxes (minus refunds).
a.

Rico, Canal Zone, and in foreign countries.

SOURCES: U.S. Department of Commerce, *Population Estimates and Projections*, Series P-25, No. 468, October 5, 1971; U.S. Department of Commerce, Office of Business Economics, *Survey of Current Business*, Volume 52, No. 4, April 1972; U.S. Department of the Treasury, *Statistical Appendix to Annual Report of the Secretary of the Treasury on the State of the Finances for the Fiscal Year Ended June 30, 1971.*

R&D PLANT

- Over the 1963-71 period, the 10 leading States in R&D plant support were among a group of 16 States. Five of them were among the leading 10 in each of the 6 years surveyed; these are Florida, California, New Mexico, New York, and Maryland.
- California regained its position as the leading recipient of R&D plant support in 1971, a position which it held in four of the 6 years surveyed.
- Most of the R&D plant support in Illinois was provided by AEC for continuing construction of the 200-Bev particle accelerator at Batavia, Illinois.
- Substantial increases to Washington supported the Fast Flux Test Facility in Richland, Wash., part of AEC's Liquid Metal Fast Breeder Reactor program.

Federal obligations for R&D plant in the 10 States leading i

[Dollars in millions]

State	TOTAL	AEC	DOD	NASA	NSF
Total	$586	$312	$154	$40	$28
California	120	40	47	23	3
Illinois	85	78	6	(c)	1
New Mexico	54	49	5	–	(c)
Washington	54	53	–	–	(c)
New York	34	23	3	(c)	4
Florida	31	(c)	22	4	1
Maryland	30	(c)	22	2	(c)
Idaho	20	20	(c)	–	–
Nevada	17	15	2	–	(c)
Pennsylvania	17	13	2	(c)	2
Other States[b]	125	22	45	11	17

[a] Includes Department of Agriculture, Environmental Protection Agency, and Office of Economic

[b] Includes outlying areas and offices abroad.

[c] Less than $500,000.

IMPACT OF SUBCONTRACTING

In order to provide some understanding of the impact of subcontracting, the responding agencies were requested to report the geographic distribution of 1971 first-tier subcontracting under each new, or continuing, prime contract or grant for which $20 million or more was obligated in 1971. The request was for data on first-tier subcontracts awarded in 1971 regardless of the year of the appropriation funding the subcontract.

DOD and AEC together provided the first-tier subcontracting data for 24 prime contracts. The NASA reporting system provides information on all first-tier subcontracts in excess of $10,000 on each of the agency's prime contracts in excess of $500,000 and on second-tier subcontracts in excess of $10,000 on each of the first-tier subcontracts in excess of $50,000. The remaining eight agencies participating in this survey did not have prime contracts or subcon-

IMPACT OF SUBCONTRACTING

In order to provide some understanding of the impact of subcontracting, the responding agencies were requested to report the geographic distribution of 1971 first-tier subcontracting under each new, or continuing, prime contract or grant for which $20 million or more was obligated in 1971. The request was for data on first-tier subcontracts awarded in 1971 regardless of the year of the appropriation funding the subcontract.

DOD and AEC together provided the first-tier subcontracting data for 24 prime contracts. The NASA reporting system provides information on all first-tier subcontracts in excess of $10,000 on each of the agency's prime contracts in excess of $500,000 and on second-tier subcontracts in excess of $10,000 on each of the first-tier subcontracts in excess of $50,000. The remaining eight agencies participating in this survey did not have prime contracts or subcontracts meeting the criteria established in the survey.

Most of the subcontracting is done by industrial firms; subcontracting is considerably less important with most of the other performers. Since more than 93 percent of total performance by industry (including industry-administered FFRDC's) as reported in this survey was in support of the programs of DOD, AEC, and NASA, the subcontracting of these three agencies largely determines the overall geographic impact of R&D subcontracting.

The sampling shows that significant redistribution of R&D funds among States would be reflected by full subcontracting data. The share of the leading R&D support States would tend to decrease somewhat (although the net change would be small in relation to their prime contracts), but in the case of many smaller support States, the net increase from subcontracts would be important in relation to prime contracts awarded.

Federal obligations for R&D plant in the 10 States leading in such support, by agency, fiscal year 1971

[Dollars in millions]

State	TOTAL	AEC	DOD	NASA	NSF	HEW	DOT	COMMERCE	INTERIOR	OTHER[a]
Total	$586	$312	$154	$40	$28	$17	$11	$9	$9	$6
California	120	40	47	23	3	1	1	–	5	–
Illinois	85	78	6	(c)	1	–	–	–	(c)	–
New Mexico	54	49	5	–	(c)	–	–	–	(c)	–
Washington	54	53	–	–	(c)	–	–	–	1	–
New York	34	23	3	(c)	4	(c)	–	4	–	–
Florida	31	(c)	22	4	1	–	–	4	(c)	(c)
Maryland	30	(c)	22	2	(c)	1	(c)	1	(c)	3
Idaho	20	20	(c)	–	–	–	–	–	–	–
Nevada	17	15	2	–	(c)	(c)	–	–	–	–
Pennsylvania	17	13	2	(c)	2	–	(c)	–	(c)	(c)
Other States[b]	125	22	45	11	17	15	9	1	2	3

[a] Includes Department of Agriculture, Environmental Protection Agency, and Office of Economic Opportunity.
[b] Includes outlying areas and offices abroad.
[c] Less than $500,000.

U.S. geographical distribution of NASA prime contract and subcontract awards, fiscal year 1971

[Dollars in thousands]

State	Prime contract awards to State		Subcontract awards			Net total - prime contract & subcontract awards	
	Amount	Percent of total	Received from other States	Awarded to other States	Net total	Amount[a]	Percent of total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
TOTAL	$2,351,542	100.0	$228,258	$228,258	$ ------	$2,351,542	100.0
Alabama	138,195	5.9	6,722	2,291	4,431	142,626	6.1
Alaska	2,135	.1	80	------	80	2,215	.1
Arizona	8,276	.4	4,929	574	4,355	12,631	.5
Arkansas	59	(c)	233	------	233	292	(c)
California	522,826	22.2	48,545	58,815	[b]10,270	512,556	21.8
Colorado	118,325	5.0	16,995	26,344	[b]9,349	108,976	4.6
Connecticut	26,435	1.1	7,917	2,799	[b]5,118	31,553	1.3
Delaware	6,723	.3	11	698	[b]687	6,036	.3
District of Columbia	27,471	1.2	77	103	[b]26	27,445	1.2
Florida	246,707	10.5	5,300	3,265	2,035	248,742	10.6
Georgia	7,481	.3	152	------	152	7,633	.3
Hawaii	3,006	.1	------	------	------	3,006	.1
Idaho	11	(c)	10	------	10	21	(c)
Illinois	9,799	.4	766	------	766	10,565	.4
Indiana	4,960	.2	(192)	13	[b]205	4,755	.2
Iowa	2,229	.1	(7,197)	------	[b]7,197	(4,968)	(.2)
Kansas	1,730	.1	1,772	------	1,772	3,502	.1
Kentucky	313	(c)	80	------	80	393	(c)
Louisiana	50,803	2.2	111	1,706	[b]1,595	49,208	2.1
Maine	2,485	.1	23	------	23	2,508	.1
Maryland	181,072	7.7	5,302	11,218	[b]5,916	175,156	7.5
Massachusetts	74,587	3.2	25,540	758	24,782	99,369	4.2
Michigan	43,538	1.9	9,352	5,423	3,929	47,467	2.0
Minnesota	7,962	.3	13,273	885	12,388	20,350	.9
Mississippi	19,008	.8	118	481	[b]363	18,645	.8
Missouri	205,482	8.7	2,189	29,935	27,746	177,736	7.6
Montana	(9)	(c)	------	------	------	(9)	(c)
Nebraska	66	(c)	1,485	------	1,485	1,551	.1
Nevada	328	(c)	------	------	------	328	(c)
New Hampshire	1,495	.1	366	------	366	1,861	.1
New Jersey	77,735	3.3	18,086	6,322	11,764	89,499	3.8
New Mexico	6,656	.3	305	------	305	6,961	.3
New York	135,656	5.8	25,247	26,202	[b]955	134,701	5.7
North Carolina	2,363	.1	227	------	227	2,590	.1
North Dakota	(3)	(c)	------	------	------	(3)	(c)
Ohio	37,588	1.6	4,713	556	4,157	41,745	1.8
Oklahoma	1,930	.1	138	------	138	2,068	.1
Oregon	597	(c)	135	------	135	732	(c)
Pennsylvania	87,306	3.7	22,719	35,354	[b]12,635	74,671	3.2
Rhode Island	468	(c)	217	------	217	685	(c)
South Carolina	127	(c)	------	------	------	127	(c)
South Dakota	476	(c)	20	------	20	496	(c)
Tennessee	1,844	.1	325	------	325	2,169	.1
Texas	212,333	9.0	5,012	7,486	[b]2,474	209,859	8.9
Utah	2,146	.1	12	------	12	2,158	.1
Vermont	112	(c)	136	------	136	248	(c)
Virginia	37,566	1.6	491	43	448	38,014	1.6
Washington	11,112	.5	7,425	------	7,425	18,537	.8
West Virginia	188	(c)	40	------	40	228	(c)
Wisconsin	21,773	.9	(949)	6,987	[b]7,936	13,837	.6
Wyoming	71	(c)	------	------	------	71	(c)

[a] Column (b) plus or minus column (f).

[b] Awards *to* other States exceed the awards *from* other States.

[c] Less than .05 percent.

NOTE: Prime contract awards include awards on R&D contracts and awards to educational and nonprofit institutions of $10,000 and over and on all other contracts of $25,000 and over; exclude awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts. Subcontract awards include those of $10,000 and over on prime contracts of $500,000 and over.

SOURCE: National Science Foundation.

ASA prime contract and subcontract awards, fiscal year 1971

[Dollars in thousands]

	Subcontract awards			Net total - prime contract & subcontract awards	
f total	Received from other States	Awarded to other States	Net total	Amount[a]	Percent of total
	(d)	(e)	(f)	(g)	(h)
0	$228,258	$228,258	$	$2,351,542	100.0
9	6,722	2,291	4,431	142,626	6.1
1	80	......	80	2,215	.1
4	4,929	574	4,355	12,631	.5
	233	......	233	292	(c)
2	48,545	58,815	[b]10,270	512,556	21.8
0	16,995	26,344	[b]9,349	108,976	4.6
1	7,917	2,799	[b]5,118	31,553	1.3
3	11	698	[b]687	6,036	.3
2	77	103	[b]26	27,445	1.2
5	5,300	3,265	2,035	248,742	10.6
3	152	......	152	7,633	.3
1	......	......	......	3,006	.1
	10	......	10	21	(c)
.4	766	......	766	10,565	.4
.2	(192)	13	[b]205	4,755	.2
.1	(7,197)	......	[b]7,197	(4,968)	(.2)
.1	1,772	......	1,772	3,502	.1
	80	......	80	393	(c)
.2	111	1,706	[b]1,595	49,208	2.1
.1	23	......	23	2,508	.1
7	5,302	11,218	[b]5,916	175,156	7.5
2	25,540	758	24,782	99,369	4.2
9	9,352	5,423	3,929	47,467	2.0
3	13,273	885	12,388	20,350	.9
8	118	481	[b]363	18,645	.8
7	2,189	29,935	27,746	177,736	7.6
	......	......	......	(9)	(c)
	1,485	......	1,485	1,551	.1
	......	......	......	328	(c)
.1	366	......	366	1,861	.1
.3	18,086	6,322	11,764	89,499	3.8
.3	305	......	305	6,961	.3
.8	25,247	26,202	[b]955	134,701	5.7
.1	227	......	227	2,590	.1
	......	......	......	(3)	(c)
.6	4,713	556	4,157	41,745	1.8
.1	138	......	138	2,068	.1
	135	......	135	732	(c)
.7	22,719	35,354	[b]12,635	74,671	3.2
	217	......	217	685	(c)
	......	......	......	127	(c)
	20	......	20	496	(c)
.1	325	......	325	2,169	.1
.0	5,012	7,486	[b]2,474	209,859	8.9
.1	12	......	12	2,158	.1
	136	......	136	248	(c)
.6	491	43	448	38,014	1.6
.5	7,425	......	7,425	18,537	.8
	40	......	40	228	(c)
.9	(949)	6,987	[b]7,936	13,837	.6
	......	......	......	71	(c)

NOTE: Prime contract awards include awards on R&D contracts and awards to educational and nonprofit institutions of $10,000 and over and on all other contracts of $25,000 and over; exclude awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts. Subcontract awards include those of $10,000 and over on prime contracts of $500,000 and over.

SOURCE: National Science Foundation.

NASA

- NASA subcontracts in 1971 totaled $330 million. Of this total, $102 million, or 31 percent, remained within the prime contract State, and $228 million, or 69 percent, crossed States lines.
- These subcontract dollars originated from prime contracts in 23 States and the District of Columbia. However, the subcontracts were performed in 44 States and the District of Columbia.
- As a result, 31 States showed an increase in their share of procurements, and 13 States and the District of Columbia showed a decrease.
- Seven of the 10 largest States in terms of 1971 prime contract awards showed net decreases of funding as a result of subcontracting.

DOD and AEC

- Those prime contracts reported by DOD and AEC together totaled $2,036 million, and first-tier subcontracts totaled $633 million.
- Of the subcontract dollars, $150 million, or 24 percent, remained within the prime contract State and $483 million, or 76 percent, crossed State lines.
- As a result of subcontracting, 38 States, the District of Columbia, and Canada showed increases, and 6 States showed decreases from their prime contract totals.

Geographic distribution of 24 DOD and AEC prime contracts and first-t

[Dollars in thousands]

State	Prime contract awards to State		Subcontract	
	Amount	Percent of total	Received from other States	Award to oth States
(a)	(b)	(c)	(d)	(e)
United States, total	$2,035,900	100.0	$482,780	$482,7
Alabama	....	.....	2,445	....
Alaska	....	.....	376	....
Arizona	....	.....	1,693	....
Arkansas	....	.....	117	....
California	451,700	22.2	109,758	67,2
Colorado	....	.....	4,961	....
Connecticut	....	.....	13,167	....
Delaware	....	.....	187	....
District of Columbia	....	.....	2,038	....
Florida	....	.....	29,437	....
Georgia	....	.....	1,119	....
Hawaii	....	.....	193	....
Idaho	45,600	2.2	5,378	4,0
Illinois	197,500	9.7	4,940	17,6
Indiana	....	.....	1,037	....
Iowa	....	.....	2,094	....
Kansas	....	.....	24	....
Kentucky	....	.....	827	....
Louisiana	....	.....	4	....
Maine	....	.....	......	....
Maryland	....	.....	7,348	....
Massachusetts	74,200	3.6	52,460	11,8
Michigan	34,000	1.7	4,406	8,3
Minnesota	....	.....	36,149	....
Mississippi	....	.....	154	....
Missouri	....	.....	10,775	....
Montana	....	.....	......	....
Nebraska	....	.....	79	....
Nevada	139,300	6.8	2,837	30,2
New Hampshire	....	.....	11,075	....
New Jersey	299,100	14.7	4,907	146,6
New Mexico	337,700	16.6	1,593	89,8
New York	172,500	8.5	51,422	42,8
North Carolina	....	.....	457	....
North Dakota	....	.....	......	....
Ohio	....	.....	18,132	....
Oklahoma	....	.....	2,472	....
Oregon	....	.....	3,829	....
Pennsylvania	137,500	6.8	18,454	46,7
Rhode Island	....	.....	138	....
South Carolina	....	.....	341	....
South Dakota	....	.....	......	....
Tennessee	91,400	4.5	5,584	4,6
Texas	....	.....	33,771	....
Utah	....	.....	2,380	....
Vermont	....	.....	......	....
Virginia	....	.....	18,565	....
Washington	55,400	2.7	14,952	12,7
West Virginia	....	.....	......	....
Wisconsin	....	.....	466	....
Wyoming	....	.....	156	....
Canada	....	.....	83	....

[a] Column (b) plus or minus column (f).
[b] Awards to other States exceed the awards from other States.
[c] Less than 0.5 percent.

NOTE: Prime
educational and n
of $25,000 and
agencies, awards
awards include th
SOURCE: Nat

Geographic distribution of 24 DOD and AEC prime contracts and first-tier subcontract awards, fiscal year 1971

[Dollars in thousands]

State	Prime contract awards to State		Subcontract awards			Net total - prime contract & subcontract awards	
	Amount	Percent of total	Received from other States	Awarded to other States	Net total	Amount[a]	Percent of total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
United States, total	$2,035,900	100.0	$482,780	$482,780	$	$2,035,900	100.0
Alabama	....	.....	2,445	......	2,445	2,445	.1
Alaska	....	.....	376	......	376	376	(c)
Arizona	....	.....	1,693	......	1,693	1,693	.1
Arkansas	....	.....	117	......	117	117	(c)
California	451,700	22.2	109,758	67,201	42,557	494,257	24.3
Colorado	....	.....	4,961	......	4,961	4,961	.2
Connecticut	....	.....	13,167	......	13,167	13,167	.6
Delaware	....	.....	187	......	187	187	(c)
District of Columbia	....	.....	2,038	......	2,038	2,038	.1
Florida	....	.....	29,437	......	29,437	29,437	1.4
Georgia	....	.....	1,119	......	1,119	1,119	.1
Hawaii	....	.....	193	......	193	193	(c)
Idaho	45,600	2.2	5,378	4,002	1,376	46,976	2.3
Illinois	197,500	9.7	4,940	17,685	[b]12,745	184,755	9.1
Indiana	....	.....	1,037	......	1,037	1,037	.1
Iowa	....	.....	2,094	......	2,094	2,094	.1
Kansas	....	.....	24	......	24	24	(c)
Kentucky	....	.....	827	......	827	827	(c)
Louisiana	....	.....	4	......	4	4	(c)
Maine	....	.....	......	......	......	....	.....
Maryland	....	.....	7,348	......	7,348	7,348	.4
Massachusetts	74,200	3.6	52,460	11,823	40,637	114,837	5.6
Michigan	34,000	1.7	4,406	8,339	[b]3,933	30,067	1.5
Minnesota	....	.....	36,149	......	36,149	36,149	1.8
Mississippi	....	.....	154	......	154	154	(c)
Missouri	....	.....	10,775	......	10,775	10,775	.5
Montana	....	.....	......	......	......	....	.....
Nebraska	....	.....	79	......	79	79	(c)
Nevada	139,300	6.8	2,837	30,224	[b]27,387	111,913	5.5
New Hampshire	....	.....	11,075	......	11,075	11,075	.5
New Jersey	299,100	14.7	4,907	146,600	[b]141,693	157,407	7.7
New Mexico	337,700	16.6	1,593	89,844	[b]88,251	249,449	12.3
New York	172,500	8.5	51,422	42,864	8,558	181,058	8.9
North Carolina	....	.....	457	......	457	457	(c)
North Dakota	....	.....	......	......	......	....	.....
Ohio	....	.....	18,132	......	18,132	18,132	.9
Oklahoma	....	.....	2,472	......	2,472	2,472	.1
Oregon	....	.....	3,829	......	3,829	3,829	.2
Pennsylvania	137,500	6.8	18,454	46,745	[b]28,291	109,209	5.4
Rhode Island	....	.....	138	......	138	138	(c)
South Carolina	....	.....	341	......	341	341	(c)
South Dakota	....	.....	......	......	......	....	.....
Tennessee	91,400	4.5	5,584	4,678	906	92,306	4.5
Texas	....	.....	33,771	......	33,771	33,771	1.7
Utah	....	.....	2,380	......	2,380	2,380	.1
Vermont	....	.....	......	......	......	....	.....
Virginia	....	.....	18,565	......	18,565	18,565	.9
Washington	55,400	2.7	14,952	12,775	2,177	57,577	2.8
West Virginia	....	.....	......	......	......	....	.....
Wisconsin	....	.....	466	......	466	466	(c)
Wyoming	....	.....	156	......	156	156	(c)
Canada	....	.....	83	......	83	83	(c)

[a] Column (b) plus or minus column (f).

[b] Awards to other States exceed the awards from other States.

[c] Less than 0.5 percent.

NOTE: Prime contract awards include awards on R&D contracts and awards to educational and nonprofit institutions of $10,000 and over and on all other contracts of $25,000 and over; they exclude awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts. Subcontract awards include those of $10,000 and over on prime contracts of $500,000 and over.

SOURCE: National Science Foundation.

Part II

FEDERAL FUNDS FOR SCIENTIFIC AND TECHNICAL INFORMATION

Scientific and technical information (S&TI) is defined as knowledge or data resulting from the conduct of research and development, or knowledge or data required for organizing, administering, or performing research and development. Such information would be used largely by scientists and engineers engaged in R&D activities.

S&TI includes activities beginning with the editing and preparation of scientific or technical reports for publication and continuing into various documentation, collection, and information service activities. They also include meetings and R&D work in the scientific information area. The latter category directly overlaps with the R&D activities reported in part I of this survey. (See technical notes.)

The data on S&TI in *Federal Funds* surveys cover only *direct* S&TI activities of Federal agencies, not S&TI activities conducted in connection with the performance of R&D contracts and grants. For this reason the totals in this report only partly reflect the total of all S&TI activities supported by the Federal Government.

Despite this limitation, the broad measurement of direct costs on a functional basis can be useful as a guide to planning and forecasting.

AGENCIES AND ACTIVITIES

- Between 1971 and 1973 overall net growth in S&TI activities is expected to be 14 percent. Growth in 1973 is scheduled to take place at a more rapid rate than in 1972.
- In 1973 HEW, Commerce, and DOD are expected to contribute more than four-fifths of the overall increase. Much of the increase within HEW is attributable to the National Institutes of Health and the Office of Education and within Commerce, to the Patent Office and the National Bureau of Standards.

Federal obligations for scientific and technical information, by agency
[Dollars in millions]

Agency	Actual	Estimates			
	1971	1972	Percent change 1971-72	1973	Percent change 1972-73
Total	$397.6	$419.0	+ 5.4	$452.7	+ 8.0
Department of Defense	141.3	145.9	+ 3.3	152.0	+ 4.2
Department of Health, Education, and Welfare	72.6	73.0	+ .5	86.9	+19.0
Department of Commerce	69.0	75.3	+ 9.1	83.4	+10.8
Library of Congress	25.0	30.5	+21.9	31.0	+ 1.9
National Aeronautics and Space Administration	27.0	27.3	+ 1.0	28.2	+ 3.4
Department of the Interior	14.3	14.2	– .1	15.3	+ 7.7
National Science Foundation	14.1	11.9	–15.0	11.6	– 3.0
Department of Agriculture	10.3	10.9	+ 6.2	11.0	+ 1.3
Other agencies	24.3	30.1	+24.1	33.3	+10.2

Trends

The following tabulation shows the tre

Trends in Federal obligations for scientific
by major cat
[Dollars in mil

Fiscal year	Total	Publication and distribution	Documentat reference a informatio services
1960	$ 75.9	$ 37.0	$ 28.4
1961	91.6	48.7	29.0
1962	128.5	55.7	42.4
1963	164.5	67.7	64.0
1964	[a]203.2	59.9	90.8
1965	224.7	68.2	102.0
1966	277.7	82.7	124.6
1967	324.4	87.1	152.5
1968	359.2	100.7	165.6
1969	362.5	96.0	170.9
1970	386.8	98.9	198.1
1971	397.6	106.0	193.8
1972 (est.)	419.0	113.7	198.3
1973 (est.)	452.7	122.0	217.1

[a] Includes $17.2 million for management, which was reported separately

- Between 1960 and 1973 Federal oblig grown six times.
- During this period the chief dollar gro tation, reference, and information serv almost eight times and in 1973 is exp the S&TI total.

rowth in S&TI activities is expected
scheduled to take place at a more

e expected to contribute more than
uch of the increase within HEW is
of Health and the Office of Educa-
ent Office and the National Bureau

echnical information, by agency
llions]

Actual	Estimates			
1971	1972	Percent change 1971-72	1973	Percent change 1972-73
$397.6	$419.0	+ 5.4	$452.7	+ 8.0
141.3	145.9	+ 3.3	152.0	+ 4.2
72.6	73.0	+ .5	86.9	+19.0
69.0	75.3	+ 9.1	83.4	+10.8
25.0	30.5	+21.9	31.0	+ 1.9
27.0	27.3	+ 1.0	28.2	+ 3.4
14.3	14.2	– .1	15.3	+ 7.7
14.1	11.9	–15.0	11.6	– 3.0
10.3	10.9	+ 6.2	11.0	+ 1.3
24.3	30.1	+24.1	33.3	+10.2

Trends

The following tabulation shows the trend of S&TI funding:

Trends in Federal obligations for scientific and technical information activities, by major categories
[Dollars in millions]

Fiscal year	Total	Publication and distribution	Documentation, reference and information services	Symposia and audiovisual media	R&D in information sciences, documentation and information systems, techniques and devices
1960	$ 75.9	$ 37.0	$ 28.4	$ 7.6	$ 2.9
1961	91.6	48.7	29.0	6.7	7.2
1962	128.5	55.7	42.4	17.0	13.3
1963	164.5	67.7	64.0	21.0	11.9
1964	[a]203.2	59.9	90.8	22.7	12.6
1965	224.7	68.2	102.0	32.0	22.5
1966	277.7	82.7	124.6	22.5	48.0
1967	324.4	87.1	152.5	31.7	53.1
1968	359.2	100.7	165.6	34.1	58.8
1969	362.5	96.0	170.9	31.8	63.7
1970	386.8	98.9	198.1	32.6	62.1
1971	397.6	106.0	193.8	32.8	65.0
1972 (est.)	419.0	113.7	198.3	33.4	73.6
1973 (est.)	452.7	122.0	217.1	34.0	79.6

[a] Includes $17.2 million for management, which was reported separately from the other categories in 1964 only.

- Between 1960 and 1973 Federal obligations for S&TI activities will have grown six times.
- During this period the chief dollar growth area has been that of documentation, reference, and information services; this category will have grown almost eight times and in 1973 is expected to account for 48 percent of the S&TI total.

- The share of publication and distribution will have fallen to an estimated 27 percent of the 1973 total (from 49 percent in 1960). Nonetheless, dollar growth in this category has been impressive.
- Obligations for symposia and audiovisual media, 8 percent of the S&TI total in 1973, increased rapidly until 1968 but the 1973 total for this category is no higher than the 1968 level.
- Obligations for research and development in information, 18 percent of the 1973 total, show the most rapid rate of growth of any category between 1960 and 1973 with strong gains in the current (1971-73) budget period.
- Total S&TI obligations in 1973 are expected to be equal to approximately 2½ percent of total Federal R&D obligations.

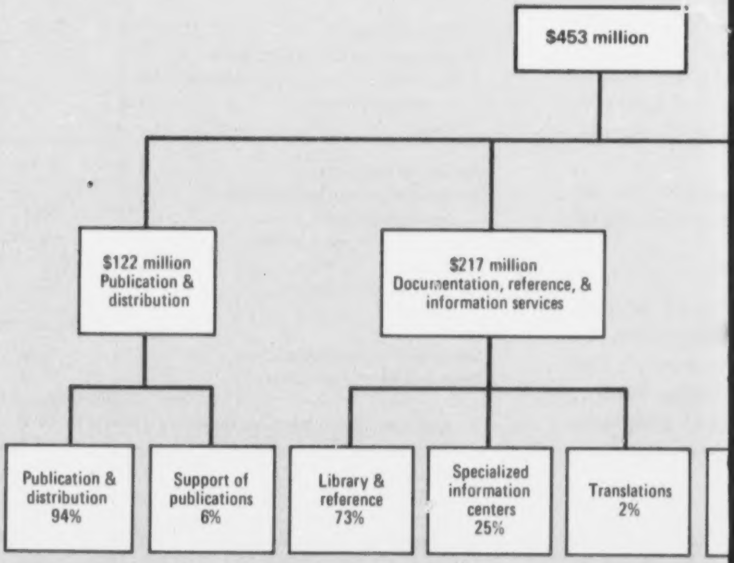
Categories

- Under each major category one subcategory represents most of the costs, and this pattern has been consistent throughout the 1960-1973 period.
- For publication and distribution in 1973 more than nine out of 10 dollars are allocated to direct costs of this function.

- For docun
tion servic
for three o

- Under sym
posia and t
three dollar

Federal obligations for scientific and technical informatio



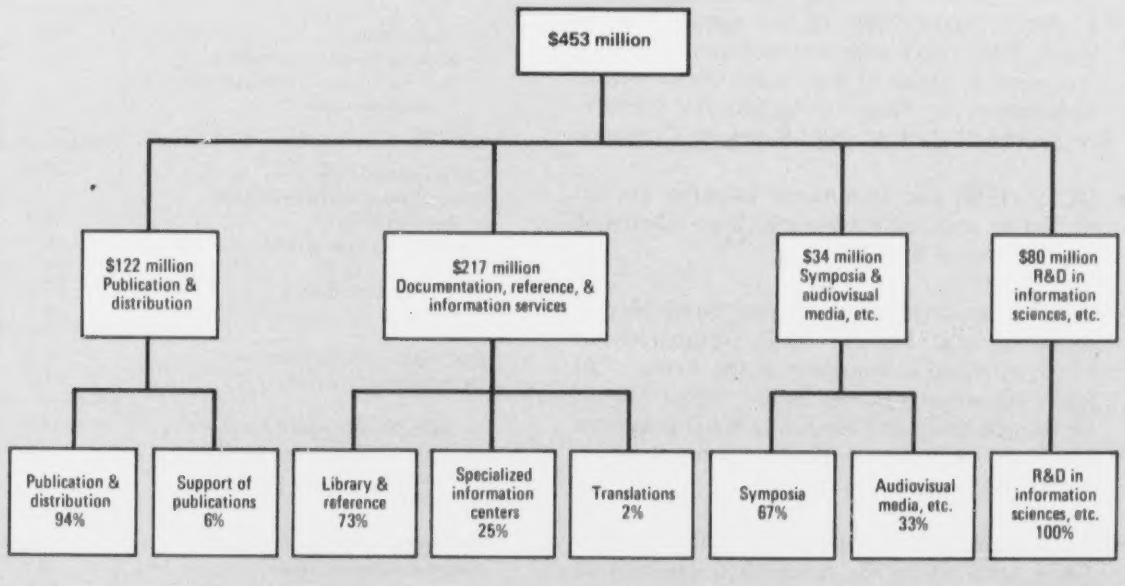
$453 million
$122 million
Publication & distribution
$217 million
Documentation, reference, & information services
Publication & distribution 94%
Support of publications 6%
Library & reference 73%
Specialized information centers 25%
Translations 2%

SOURCE: National Science Foundation

Categories

- Under each major category one subcategory represents most of the costs, and this pattern has been consistent throughout the 1960-1973 period.
- For publication and distribution in 1973 more than nine out of 10 dollars are allocated to direct costs of this function.
- For documentation, reference, and information services, library and reference accounts for three out of four dollars.
- Under symposia and audiovisual media, symposia and technical meetings use two out of three dollars.

Federal obligations for scientific and technical information by activity, FY 1973 (est.)


$453 million
$122 million Publication & distribution
$217 million Documentation, reference, & information services
$34 million Symposia & audiovisual media, etc.
$80 million R&D in information sciences, etc.
Publication & distribution 94%
Support of publications 6%
Library & reference 73%
Specialized information centers 25%
Translations 2%
Symposia 67%
Audiovisual media, etc. 33%
R&D in information sciences, etc. 100%

SOURCE: National Science Foundation

Agencies

- For 1973, although 22 agencies reported S&TI activities, the leading 12 account for 98 percent of the total dollars obligated.
- S&TI costs are not wholly comparable between agencies; some agencies have full reporting systems while others lack the means for capturing all their S&TI costs. In the 1971-73 period, 13 agencies reported no S&TI obligations despite reporting R&D programs. In some cases agencies cannot identify S&TI costs; in others, all such costs are incurred within extramural R&D contracts and grants.
- The ratio of S&TI obligations to an agency's R&D obligations varies widely from agency to agency. S&TI efforts only in some cases bear a direct relationship to an agency's R&D work. They often represent independent services, such as those of the Patent Office within Commerce, the National Agricultural Library, or the S&TI part of the Library of Congress.
- DOD, HEW, and Commerce together are expected to account for almost three-fourths of the S&TI total in 1973.
- DOD is responsible for an estimated 34 percent of total Federal S&TI obligations in 1973, as much a reflection of the Army's full S&TI reporting systems as any other factor. (Although Navy and Air Force R&D programs are larger than those of the Army, their reported S&TI totals are lower.)
- HEW represents 19 percent of the Federal S&TI total in 1973; more than one-half of this effort is in the National Institutes of Health, much of it in the National Library of Medicine.

Distribution of Federal obligations for scientific and technical information, by agency and subdivision, fiscal year 1973 (est.)

[Dollars in millions]

Agency and subdivision	Total obligations	Percent
Total, all agencies	$ 452.7	100.0
Department of Defense	152.0	33.6
Department of the Army	71.3	15.7
Department of the Navy	16.4	3.6
Department of the Air Force	9.5	2.1
Defense Agencies	54.9	12.1
Department of Health, Education, and Welfare	86.9	19.2
National Institutes of Health	51.8	11.4
(National Library of Medicine)	(28.0)	(6.2)
Office of Education	15.7	3.5
Food and Drug Administration	9.8	2.2
Health Services and Mental Health Administration	9.2	2.0
Social Security Administration	.4	.1
Department of Commerce	83.4	18.4
Patent Office	63.7	14.1
National Bureau of Standards	16.3	3.6
National Oceanic and Atmospheric Administration	2.7	.6
Other	.7	.1
Library of Congress	31.0	6.9
National Aeronautics and Space Administration	28.2	6.2
Department of the Interior	15.3	3.4
Geological Survey	10.9	2.4
Other	4.4	1.0
National Science Foundation	11.6	2.6
Department of Agriculture	11.0	2.4
National Agricultural Library	4.1	.9
Agricultural Research Service	3.2	.7
Forest Service	3.1	.7
Other	.7	.1
Department of Transportation	8.6	1.9
Veterans Administration	6.4	1.4
Atomic Energy Commission	4.8	1.1
Smithsonian Institution	4.8	1.1
Other agencies	8.7	1.9

Distribution of Federal obligations for scientific and technical information, by agency and subdivision, fiscal year 1973 (est.)

[Dollars in millions]

Agency and subdivision	Total obligations	Percent
Total, all agencies	$ 452.7	100.0
Department of Defense	152.0	33.6
Department of the Army	71.3	15.7
Department of the Navy	16.4	3.6
Department of the Air Force	9.5	2.1
Defense Agencies	54.9	12.1
Department of Health, Education, and Welfare	86.9	19.2
National Institutes of Health	51.8	11.4
(National Library of Medicine)	(28.0)	(6.2)
Office of Education	15.7	3.5
Food and Drug Administration	9.8	2.2
Health Services and Mental Health Administration	9.2	2.0
Social Security Administration	.4	.1
Department of Commerce	83.4	18.4
Patent Office	63.7	14.1
National Bureau of Standards	16.3	3.6
National Oceanic and Atmospheric Administration	2.7	.6
Other	.7	.1
Library of Congress	31.0	6.9
National Aeronautics and Space Administration	28.2	6.2
Department of the Interior	15.3	3.4
Geological Survey	10.9	2.4
Other	4.4	1.0
National Science Foundation	11.6	2.6
Department of Agriculture	11.0	2.4
National Agricultural Library	4.1	.9
Agricultural Research Service	3.2	.7
Forest Service	3.1	.7
Other	.7	.1
Department of Transportation	8.6	1.9
Veterans Administration	6.4	1.4
Atomic Energy Commission	4.8	1.1
Smithsonian Institution	4.8	1.1
Other agencies	8.7	1.9

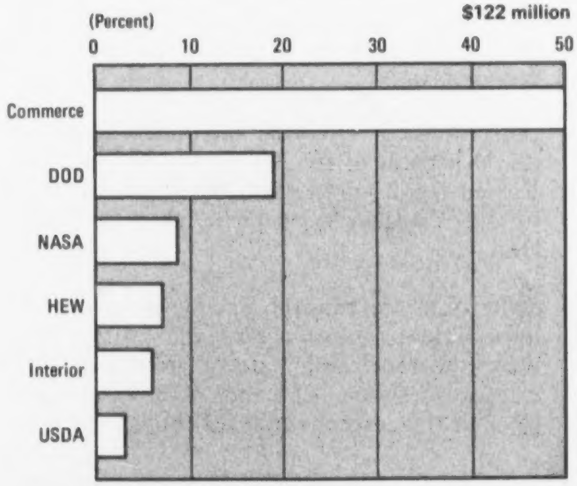
- The 18 percent provided by Commerce chiefly stems from Patent Office activities.
- NASA and AEC, despite large overall R&D programs, report comparatively small amounts for S&TI purposes because so much of their R&D effort, including S&TI activities connected therewith, is performed extramurally.

Activities

- Certain agencies tend to be predominant in certain categories of activity: DOD in all four major ones and HEW in three out of four, while DOT is predominant in only one.
- Often an agency will initiate S&TI activities in one category, or subcategory, and as its R&D programs grow, extend into the other categories. S&TI functions tend to flow back and forth between categories.

Share of Selected Agencies in Major Categories of S&TI Activity, FY 1973 (est.)

Category 1. Publication and Distribution



SOURCE: National Science Foundation

COMMERCE: Patent Office
- 85,000 patents in FY 1973 (est.)

Official Gazette, weekly abstracts of current patents

DOD: Departments of the Army, Navy, and Air Force
- Journal articles
- Technical reports
- Technical notes
- Technical memorandums
- Contractors' and grantees' reports
- Research reviews
- Research reports
- Newsletter
- Surveys
- Monographs
- Proceedings of symposia
- Handbooks
- Books
- Abstracts and bibliographies

NASA
- Journal articles
- Technical reports, notes, and memorandums
- Contractors' reports
- Conference proceedings
- *Scientific and Technical Abstracts* (STAR)
- *International Aerospace Abstracts*
- Indexes
- Bibliographies
- Technical reprints
- Special publications

HEW: National Institutes of Health
- Journals of the institutes
- Journal articles
- Indexes
- Bibliographies
- Abstracts
- Monographs
- Books
- Reports

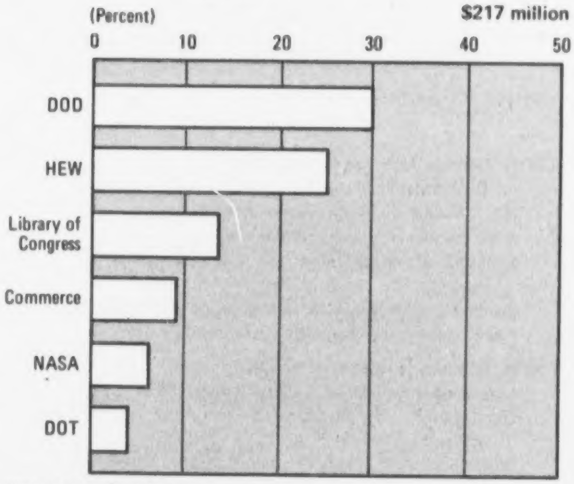
Health Services and Mental Health Administration
- Scientific and technical papers
- Reports of research projects
- Reviews and analyses
- Journal articles

Office of Education
- Research in Education

INTERIOR: Geological Survey
- Books
- Maps
- Charts
- Atlases
- Research summaries
- Journal articles
- *Bibliography of North American Geology*
- *Geophysical Abstracts*

AEC
- Technical reports
- Progress reports
- Summary reports
- Topical reports
- Journal articles
- Proceedings of meetings
- *Nuclear Science Abstracts*
- Progress reviews
- Books
- Monographs
- Bibliographies

Category 2. Documentation, reference, and information services



SOURCE: National Science Foundation

DOD: Defense Agencies
- Defense Documentation Center

Departments of the Army, Navy, and Air Force
- Libraries
- Specialized information centers
- Technical information analysis centers
- Translations

HEW: National Institutes of Health
- National Library of Medicine
- Specialized information centers
- Translations

Office of Education
- ERIC system of information clearinghouses in education research

National Ce
Food anc
Specialized

LIBRARY OF C
Science and

COMMERCE: P
Search room
National
National Tec
National Sta

NASA
STI documen
Headquarters
Specialized i
Regional diss
Translations

DOT
Specialized i

NSF
Support of
services

USDA
National Agr

VA
Medical libra

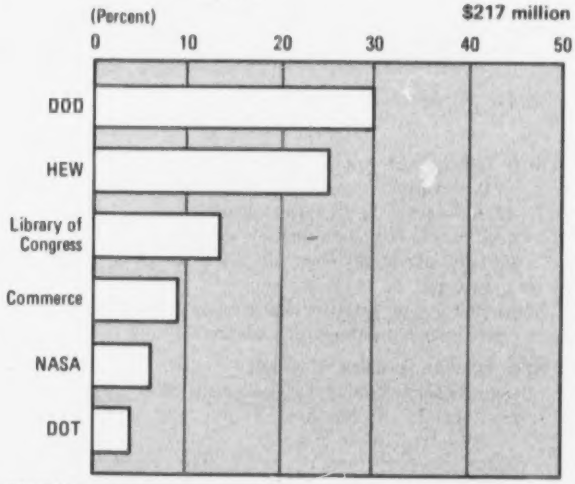
AEC
Abstract and

SMITHSONIAN
Science Info

Bibliography of North American Geology
Geophysical Abstracts

AEC
Technical reports
Progress reports
Summary reports
Topical reports
Journal articles
Proceedings of meetings
Nuclear Science Abstracts
Progress reviews
Books
Monographs
Bibliographies

Category 2. Documentation, reference, and information services



SOURCE: National Science Foundation

DOD: Defense Agencies
Defense Documentation Center
Departments of the Army, Navy, and Air Force
Libraries
Specialized information centers
Technical information analysis centers
Translations

HEW: National Institutes of Health
National Library of Medicine
Specialized information centers
Translations
Office of Education
ERIC system of information clearinghouses in education research
National Center for Educational Communication
Food and Drug Administration
Specialized information centers

LIBRARY OF CONGRESS
Science and technology portion

COMMERCE: Patent Office
Search room
National Bureau of Standards
National Technical Information Service (NTIS)
National Standard Reference Data System (NSRDS)

NASA
STI documentation facility
Headquarters and field center libraries
Specialized information centers
Regional dissemination centers
Translations

DOT
Specialized information centers

NSF
Support of abstracting, indexing, and other documentation services

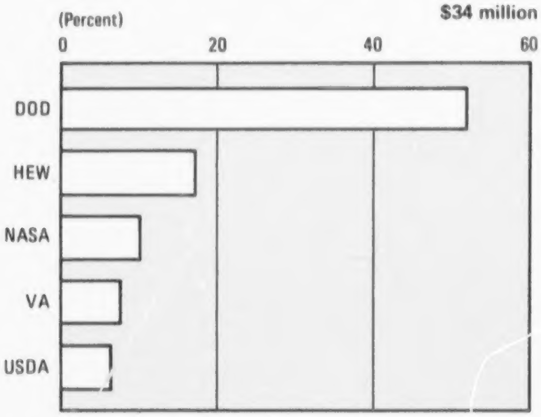
USDA
National Agricultural Library

VA
Medical library services in 165 hospitals

AEC
Abstract and review preparation

SMITHSONIAN
Science Information Exchange

Category 3. Symposia and audiovisual media



SOURCE: National Science Foundation

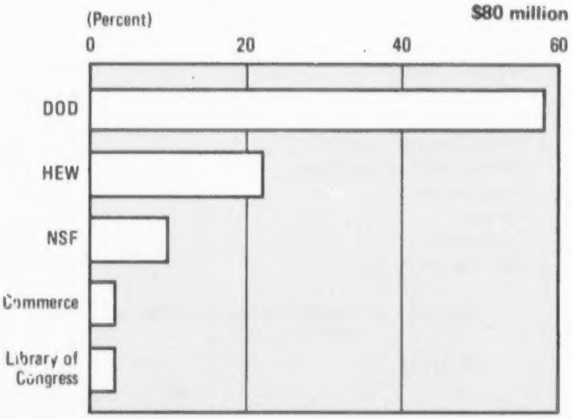
DOD: Departments of the Army, Navy, and Air Force
- Science conferences
- Support of symposia with professional groups, scientific societies, and educational institutions
- Motion pictures
- Slides
- Video tapes
- Exhibits

HEW: National Institutes of Health
- Travel to scientific meetings, U.S. and abroad
- Support of conferences and symposia
- Support of international congresses
- Sound films on body functions, diseases, and treatment
- TV interviews
- Slides
- Photographs
- Exhibits

NASA
- Participation in and support of scientific symposia and technical meetings

VA
- Participation in seminars and symposia
- Films
- Slides

Category 4. Research and development in information sciences, documentation, and information systems, techniques, and devices



SOURCE: National Science Foundation

DOD: Defense Agencies (largely ARPA)
Departments of the Army, Navy, and Air Force
- R&D in advanced information systems
- Development of engineering data systems
- Support of development of discipline-based information systems
- Studies of man-computer relationships (Project Mack)
- Basic research in information sciences

HEW: National Institutes of Health
- Improvement of MEDLARS systems at NLM
- Development of mechanized searching services in the institutes
- Development of computer time-sharing techniques

Health Services and Mental Health Administration
- Improvement of information systems

Office of Education
- Bibliographic automation of large library operations
- Development of an automated instructional materials-handling program

NSF

Support of systems development: discipline - oriented
university - centered
national networks
data systems

Support of research on: system evaluation measures
quality control criteria
information formatting
man-machine user studies

APPENDIXES

A. Technical Notes
B. Federally Funded Research and Development Centers
C. Statistical Tables, Part I
D. Statistical Tables, Part II

APPENDIX A

Technical Notes

These technical notes deal with scope and method, definitions, changes in reporting, limitations of data, relation to other reports, and sources. The definitions and reporting requirements are unchanged from the preceding issue of the Federal Funds series.

SCOPE AND METHOD

This report is organized in two parts: Part I is concerned with Federal funds for research, development, and R&D plant; and part II reports on funds for activities associated with the collection and dissemination of scientific and technical information. Data on funds obligated for the collection of general-purpose scientific data (formerly part III of the report) are not included in Volume XXI.

Between March and May of 1972, 35 Federal agencies and their components, a total of 87 individual respondents, submitted the data contained in this report in response to a survey questionnaire developed by the Foundation and distributed in December 1971. With the exception of AEC and NASA, the data received from the agencies were in terms of obligations and expenditures incurred, or expected to be incurred, regardless of when the funds were appropriated or whether they were identified in the respondent's budget specifically for scientific activities. The AEC data for research and development were reported in terms of accrued costs, while the R&D plant transactions were reported in terms of obligations. NASA reported its 1971 transactions in terms of obligations incurred, whereas the 1972 and 1973 transactions are in terms of the budget plan, which approximates obligations.

Federal agencies also provided R&D data to the Office of Management and Budget for inclusion in "Special Analysis R, Federal Research and Development Programs" in *The Budget of the United States Government, Fiscal Year 1973.* Although the R&D data in the two reports are reconcilable (see Relation to Other Reports, pg 44), the data in this report are more comprehensive and are analyzed in greater detail. Furthermore, the *Federal Funds* report incorporates data revisions that may have resulted from subsequent updating of the R&D portion of the budget as originally presented by the President in January 1972.

DEFINITIONS

The definitions are presented to correspond with the two parts of the report. Some definitions in part I are also applicable to part II. The definitions are essentially unchanged from prior issues of the *Federal Funds* series.

Part I. Research, Development, and R&D Plant

(1) RESEARCH, DEVELOPMENT, AND R&D PLANT

This term includes all direct, indirect, incidental, or related costs resulting from or necessary to research, development, and R&D plant, regardless of whether the research and development are performed by a Federal agency (intramural) or performed by private individuals and organizations under grant or contract (extramural). Research and development exclude routine product testing, quality control, mapping and surveys, collection of

PENDIX A

chnical Notes

th scope and method, defini-
tions of data, relation to other
ons and reporting requirements
ng issue of the Federal Funds

SCOPE AND METHOD

This report is organized in two parts: Part I is concerned with Federal funds for research, development, and R&D plant; and part II reports on funds for activities associated with the collection and dissemination of scientific and technical information. Data on funds obligated for the collection of general-purpose scientific data (formerly part III of the report) are not included in Volume XXI.

Between March and May of 1972, 35 Federal agencies and their components, a total of 87 individual respondents, submitted the data contained in this report in response to a survey questionnaire developed by the Foundation and distributed in December 1971. With the exception of AEC and NASA, the data received from the agencies were in terms of obligations and expenditures incurred, or expected to be incurred, regardless of when the funds were appropriated or whether they were identified in the respondent's budget specifically for scientific activities. The AEC data for research and development were reported in terms of accrued costs, while the R&D plant transactions were reported in terms of obligations. NASA reported its 1971 transactions in terms of obligations incurred, whereas the 1972 and 1973 transactions are in terms of the budget plan, which approximates obligations.

Federal agencies also provided R&D data to the Office of Management and Budget for inclusion in "Special Analysis R, Federal Research and Development Programs" in *The Budget of the United States Government, Fiscal Year 1973.* Although the R&D data in the two reports are reconcilable (see Relation to Other Reports, pg 44), the data in this report are more comprehensive and are analyzed in greater detail. Furthermore, the *Federal Funds* report incorporates data revisions that may have resulted from subsequent updating of the R&D portion of the budget as originally presented by the President in January 1972.

DEFINITIONS

The definitions are presented to correspond with the two parts of the report. Some definitions in part I are also applicable to part II. The definitions are essentially unchanged from prior issues of the *Federal Funds* series.

Part I. Research, Development, and R&D Plant

(1) RESEARCH, DEVELOPMENT, AND R&D PLANT

This term includes all direct, indirect, incidental, or related costs resulting from or necessary to research, development, and R&D plant, regardless of whether the research and development are performed by a Federal agency (intramural) or performed by private individuals and organizations under grant or contract (extramural). Research and development exclude routine product testing, quality control, mapping and surveys, collection of general-purpose statistics, experimental production, and activities concerned primarily with the dissemination of scientific information and the training of scientific manpower.

a. **Research** is systematic, intensive study directed toward fuller scientific knowledge or understanding of the subject studied. Research may be classified as either basic or applied.

In *basic research* the investigator is concerned primarily with gaining a fuller knowledge or understanding of the subject under study.

In *applied research* the investigator is primarily interested in a practical use of the knowledge or understanding for the purpose of meeting a recognized need.

b. **Development** is systematic use of the knowledge and understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes. It excludes quality control, routine product testing, and production.

c. **R&D plant** (R&D facilities and fixed equipment, such as reactors, wind tunnels, and radio telescopes) includes acquisition of, construction of, major repairs to, or alterations in structures, works, equipment, facilities, or land, for use in R&D activities at Federal or non-Federal installations. Excluded from the R&D plant category are expendable equipment and office furniture and equipment. Obligations for foreign R&D plant are limited to Federal funds for facilities located abroad and used in support of foreign research and development.

(2) OBLIGATIONS AND EXPENDITURES

a. **Obligations** represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when future payment of money is required.

b. **Expenditures** represent the amounts for checks issued and cash payments made during a given period, regardless of when the funds were appropriated.

For those agencies operating on a cost-type budget, accrued expenditures and costs are reported instead of obligations. Accrued expenditures represent all costs accrued during the reporting period except those subject to reimbursement from other agencies. The information on expenditures represents net cash payments for research, development, and R&D plant, exclusive of any receipts of the agency for those purposes.

The obligations and expenditures reported cover all transactions from all funds available to the agency from direct appropriations, trust funds or special account receipts, corporate income, or other sources, including funds appropriated to the President, that the agency received or expects to receive. The amounts reported for each year reflect obligations and expenditures for that year regardless of when the funds were originally authorized or received and regardless of whether they were appropriated, received, or identified in the agency's budget specifically for research, development, or R&D plant.

An agency making a transfer of funds to another agency includes such transfers in its report of obligations and expenditures. The receiving agency does not report, for purposes of this survey, on funds transferred to it from another agency. Similarly, a subdivision of an agency that transfers funds to another subdivision within its own agency reports such obligations or expenditures.

Obligations and expenditures for work performed in foreign countries include funds directly available to Federal agencies and special foreign currencies separately appropriated. (The latter currencies are derived largely from provisions of Public Law 480, 1954, as amended.)

(3) COST COVERAGE

Funds reported for research and development reflect full costs. In addition to costs of specific R&D projects, the applicable overhead costs are also included. The amounts reported include the costs of planning and administering R&D programs, laboratory overhead, pay of military personnel, and departmental administration.

(4) FISCAL YEAR

The fiscal year is the Government accounting period beginning July 1 of one year and ending June 30 of the following calendar year; thus, fiscal year 1973 began on July 1, 1972 and will end June 30, 1973.

(5) AGENCY

An agency is an organization of the Federal Government whose principal executive officer reports to the President. The two exceptions are the Library of Congress and the Postal Service, which are also included in the survey. The term subdivision refers to any major organizational unit of a reporting agency, such as a bureau, division, office, or service.

(6) PERFORMERS

Performers are either intramural organizations accomplishing operating functions or extramural organizations or persons receiving support or providing services as a result of a contract or grant.

a. **Intramural performers** are the agencies of the Federal Government. Their work is carried on directly by their own personnel. Obligations reported under this category are for activities performed or to be performed by the reporting agency itself, or are funds that this agency transfers to another Federal agency to have its activities performed for it. However, the ultimate performer must be a Federal agency. If the ultimate performer is not a Federal agency, the funds so transferred are reported by the transferring agency under the appropriate extramural performer (industrial firms, universities and colleges, other nonprofit institutions). Intramural performance includes the costs of supplies and equipment, essentially of an "off-the-shelf" nature, which are procured for use in intramural research and development. Also included as part of the intramural performance total are the expenses of Federal personnel engaged in planning and administering intramural and extramural R&D programs.

b. **Extramural performers** are all organizations outside the Federal complex that perform with Federal funds under contract or grant. Only costs of actual extramural performance are reported. The costs of extramurally procured "off-the-shelf" supplies and equipment required to support intramural research and development are reported as part of the costs of intramural performance. For example, the purchase from an extramural source of a launch vehicle which is operational, i.e., has gone beyond the development or prototype stage, and which is used in an intramural Federal installation for the performance of research and development, is reported as part of the cost of intramural research and development. Extramural performers are identified as follows:

(i) *Industrial firms* are those organizations that may legally distribute net earnings to individuals or to other organizations.

(ii) *Universities and colleges* are institutions engaged primarily in providing resident instruction for at least a 2-year program above the secondary school level. Included are colleges of liberal arts; schools of arts and sciences; professional schools, such as in engineering and medicine, including affiliated hospitals; associated research institutes; and agricultural experiment stations.

(iii) *Other nonprofit institutions* are private organizations other than educational institutions, no part of whose net earnings inure to the benefit of a private stockholder or individual, and other private organizations organized for the exclusive purpose of turning over their entire net earnings to such nonprofit organizations.

(iv) *Federally Funded Research and Development Centers* are R&D-performing organizations exclusively or substantially financed by the Federal Government that are supported by the Federal Government either to meet a particular R&D objective or, in some instances, to provide major facilities at universities for research and associated training purposes. Each center is administered by one of the above extramural performers.

In general, all of the following qualification criteria are met by an institutional unit before it is included in the Federally Funded Research and Development Centers category: 1) its primary activities include one or more of the following: basic research, applied research, development, or management of research and development (specifically excluded are organizations engaged primarily in routine quality control and testing, routine service activities, production, mapping and surveys, and information dissemination); 2) it is a separate operational unit within the parent organization or is organized as a separately incorporated organization; 3) it

performs a
ment either
or under a
in either c
Government
percent or
one agency
tionship wi
as evidence
agency; 6)
for in the
has an aver
ment) of at

(v) *Fore*
organizatio
zations, su
abroad fina
payments t
ing researc
ment. (The
"offshore"
scientists pe

(vi) *Oth*
performers
and local go

(7) FIELDS OF

The fields
broad field ca
detailed fields.
physical scienc
ing, social scie
The following
the broad fields

a. **Life sci**
other medical

Life science

Anatomy; animal
oceanography; bioph
biology; genetics; i
tion and metabolism
cy; physical anthro
sciences; podiatry;
radiology; surgery;

Research in
logical, clinical
nature of the pa

Biological s
medical and ot
the origin, dev
living things.

nature, which are procured for use in intramural research and development. Also included as part of the intramural performance total are the expenses of Federal personnel engaged in planning and administering intramural and extramural R&D programs.

b. **Extramural performers** are all organizations outside the Federal complex that perform with Federal funds under contract or grant. Only costs of actual extramural performance are reported. The costs of extramurally procured "off-the-shelf" supplies and equipment required to support intramural research and development are reported as part of the costs of intramural performance. For example, the purchase from an extramural source of a launch vehicle which is operational, i.e., has gone beyond the development or prototype stage, and which is used in an intramural Federal installation for the performance of research and development, is reported as part of the cost of intramural research and development. Extramural performers are identified as follows:

(i) *Industrial firms* are those organizations that may legally distribute net earnings to individuals or to other organizations.

(ii) *Universities and colleges* are institutions engaged primarily in providing resident instruction for at least a 2-year program above the secondary school level. Included are colleges of liberal arts; schools of arts and sciences; professional schools, such as in engineering and medicine, including affiliated hospitals; associated research institutes; and agricultural experiment stations.

(iii) *Other nonprofit institutions* are private organizations other than educational institutions, no part of whose net earnings inure to the benefit of a private stockholder or individual, and other private organizations organized for the exclusive purpose of turning over their entire net earnings to such nonprofit organizations.

(iv) *Federally Funded Research and Development Centers* are R&D-performing organizations exclusively or substantially financed by the Federal Government that are supported by the Federal Government either to meet a particular R&D objective or, in some instances, to provide major facilities at universities for research and associated training purposes. Each center is administered by one of the above extramural performers.

In general, all of the following qualification criteria are met by an institutional unit before it is included in the Federally Funded Research and Development Centers category: 1) its primary activities include one or more of the following: basic research, applied research, development, or management of research and development (specifically excluded are organizations engaged primarily in routine quality control and testing, routine service activities, production, mapping and surveys, and information dissemination); 2) it is a separate operational unit within the parent organization or is organized as a separately incorporated organization; 3) it performs actual research and development or R&D management either upon direct request of the Federal Government or under a broad charter from the Federal Government, but in either case under the direct monitorship of the Federal Government; 4) it receives its major financial support (70 percent or more) from the Federal Government, usually from one agency; 5) it has or is expected to have a long-term relationship with its sponsoring agency (about 5 years or more), as evidenced by specific obligations assumed by it and the agency; 6) most or all of its facilities are owned or are funded for in the contract with the Federal Government; and 7) it has an average annual budget (operating and capital equipment) of at least $500,000.

(v) *Foreign performers* are confined to foreign citizens, organizations, or governments, as well as international organizations, such as NATO, UNESCO, WHO, performing work abroad financed by the Federal Government. Excluded are payments to U.S. agencies, organizations, or citizens performing research and development abroad for the Federal Government. (The survey objectives do not seek information on "offshore" payment.) Also excluded are payments to foreign scientists performing in the United States.

(vi) *Other performers* include all other miscellaneous performers not covered in the foregoing categories, e.g., State and local governments and private individuals.

(7) FIELDS OF SCIENCE

The fields of science in this survey are divided into eight broad field categories, most of them consisting of a number of detailed fields. The broad fields are life sciences, psychology, physical sciences, environmental sciences, mathematics, engineering, social sciences, and other sciences not elsewhere classified. The following listing presents the fields grouped under each of the broad fields, together with illustrative disciplines.

a. **Life sciences** consist of the biological, clinical medical, other medical sciences, and life sciences not elsewhere classified.

Life sciences include the following disciplines:

Anatomy; animal sciences; bacteriology; biochemistry; biogeography; biological oceanography; biophysics; dentistry; ecology; embryology; entomology; evolutionary biology; genetics; immunology; internal medicine; microbiology; neurology; nutrition and metabolism; opthalmology; parasitology; pathology; pharmacology; pharmacy; physical anthropology; physical medicine and rehabilitation; physiology; plant sciences; podiatry; preventive medicine and public health; psychiatry; radiobiology; radiology; surgery; systematics; veterinary medicine.

Research in some of these disciplines may be classed as biological, clinical medical, or other medical, depending upon the nature of the particular project.

Biological sciences are those which, apart from the clinical medical and other medical sciences as defined below, deal with the origin, development, structure, function, and interaction of living things.

Clinical medical sciences are concerned with the study of the pathogenesis, diagnosis, or therapy of a particular disease or abnormal condition in living human subjects under controlled conditions.

Other medical sciences are concerned with studies of the causes, effects, prevention, or control of abnormal conditions in man or in his environment as they relate to health, except for the clinical aspects as defined above.

Life sciences, nec[1]

b. **Psychology** deals with behavior, mental processes, and individual and group characteristics and abilities. Psychology is divided into three categories: biological aspects, social aspects, and psychological sciences not elsewhere classified. Examples of the disciplines under each of these fields are:

Biological aspects:

experimental psychology; animal behavior; clinical psychology; comparative psychology; ethology.

Social aspects:

social psychology; educational, personnel, vocational psychology and testing; industrial and engineering psychology; development and personality.

Psychological sciences, nec[1]

c. **Physical sciences** are concerned with the understanding of the material universe and its phenomena. They comprise the fields of astronomy, chemistry, physics, and physical sciences not elsewhere classified. Examples of the disciplines under each of these fields are:

Astronomy:

laboratory astrophysics; optical astronomy; radio astronomy; theoretical astrophysics; X-ray, Gamma-ray, neutrino astronomy.

Chemistry:

inorganic; organo-metallic; organic; physical.

Physics:

acoustics; atomic and molecular; condensed matter; elementary particles; nuclear structure; optics; plasma.

Physical sciences, nec[1]

d. **Environmental sciences** (terrestrial and extraterrestrial) are concerned with the gross nonbiological properties of the areas of the solar system which directly or indirectly affect man's survival and welfare; they comprise the fields of atmospheric sciences, geological sciences, oceanography, and environmental sciences not elsewhere classified. Obligations for oceanography are confined to studies supporting physical oceanography. Studies pertaining to life in the sea, or other bodies of water, are reported as support of biology. Support of ship operations is, where appropriate, prorated between physical and biological oceanography. Examples of the disciplines under each of these fields are:

Atmospheric sciences:

aeronomy; solar; weather modification; extraterrestrial atmospheres; meteorology.

Geological sciences:

engineering geophysics; general geology; geodesy and gravity; geomagnetism; hydrology; inorganic geochemistry; isotopic geochemistry; organic geochemistry; laboratory geophysics; paleomagnetism; paleontology; physical geography and cartography; seismology; soil sciences.

Oceanography:

chemical oceanography; geological oceanography; physical oceanography; marine geophysics.

Environmental sciences, nec[1]

e. **Mathematics** employs logical reasoning with the aid of symbols and is concerned with the development of methods of operation employing such symbols. Examples of mathematical disciplines are:

algebra; analysis; applied mathematics; computer science; foundations and logic; geometry; numerical analysis; statistics; topology.

f. **Engineering** is concerned with studies directed toward developing engineering principles or toward making specific scientific principles usable in engineering practice. Engineering is divided into eight fields: aeronautical, astronautical, chemical, civil, electrical, mechanical, metallurgy and materials, and engineering not elsewhere classified. Examples of disciplines under each of these fields are:

Aeronautical:

aerodynamics.

Astronautical:

aerospace; space technology.

Chemical:

petroleum; petroleum refining; process.

Civil:

architectural; hydraulic; hydrologic; marine; sanitary and environmental; structural; transportation.

Electrical:

communication; electronic power.

Mechanical:

engineering mechanics.

Metallurgy and Materials:

ceramic; mining; textile; welding.

Engineering, nec[1]

agricultural; industrial and management; nuclear; ocean engineering; systems.

g. **Social sciences** are directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group. These sciences include anthropology, economics, history, linguistics, political science, sociology, and biological oceanography. Examples of the disciplines under each of these fields are:

---

[1] Not elsewhere classified. Includes multidisciplinary projects within the broad field and single-disciplinary projects for which a separate field has not been assigned.

Atmospheric sciences:

aeronomy; solar; weather modification; extraterrestrial atmospheres; meteorology.

Geological sciences:

engineering geophysics; general geology; geodesy and gravity; geomagnetism; hydrology; inorganic geochemistry; isotopic geochemistry; organic geochemistry; laboratory geophysics; paleomagnetism; paleontology; physical geography and cartography; seismology; soil sciences.

Oceanography:

chemical oceanography; geological oceanography; physical oceanography; marine geophysics.

Environmental sciences, nec[1]

e. **Mathematics** employs logical reasoning with the aid of symbols and is concerned with the development of methods of operation employing such symbols. Examples of mathematical disciplines are:

algebra; analysis; applied mathematics; computer science; foundations and logic; geometry; numerical analysis; statistics; topology.

f. **Engineering** is concerned with studies directed toward developing engineering principles or toward making specific scientific principles usable in engineering practice. Engineering is divided into eight fields: aeronautical, astronautical, chemical, civil, electrical, mechanical, metallurgy and materials, and engineering not elsewhere classified. Examples of disciplines under each of these fields are:

Aeronautical:

aerodynamics.

Astronautical:

aerospace; space technology.

Chemical:

petroleum; petroleum refining; process.

Civil:

architectural; hydraulic; hydrologic; marine; sanitary and environmental; structural; transportation.

Electrical:

communication; electronic power.

Mechanical:

engineering mechanics.

Metallurgy and Materials:

ceramic; mining; textile; welding.

Engineering, nec[1]

agricultural; industrial and management; nuclear; ocean engineering; systems.

g. **Social sciences** are directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group. These sciences include anthropology, economics, history, linguistics, political science, sociology, and social sciences not elsewhere classified. Examples of the disciplines under the fields of social science are:

Anthropology:

archaeology; cultural and personality; social and ethnology; applied anthropology.

Economics:

econometrics and economic statistics; history of economic thought; international economics; industrial, labor and agricultural economics; macroeconomics; microeconomics; public finance and fiscal policy; theory; economic systems and development.

History:

cultural; political; social; history and philosophy of science.

Linguistics:

anthropological-archaeological; computational; psycholinguistics; sociolinguistics.

Political science:

area or regional studies; comparative government; history of political ideas; international relations and law; national political and legal systems; political theory; public administration.

Sociology:

comparative and historical; complex organizations; culture and social structure; demography; group interactions; social problems and social welfare; sociological theory.

Social sciences, nec[1]

research in law and education not elsewhere classified; socioeconomic geography.

h. **Other sciences not elsewhere classified** includes multidisciplinary and interdisciplinary projects that cannot be classified within one of the above broad fields of science.

(8) GEOGRAPHIC DISTRIBUTION OF 1971 R&D OBLIGATIONS

a. Eleven agencies participated in the survey on the geographic distribution of obligations for research and development and R&D plant. These 11 respondents accounted for 98 percent of total Federal R&D and R&D plant obligations in 1971. The respondents were the Departments of Agriculture, Commerce, Defense, the Interior, Transportation, and Health, Education, and Welfare; the Atomic Energy Commission; the Environmental Protection Agency; the National Aeronautics and Space Administration; the National Science Foundation; and the Office of Economic Opportunity.

b. Data for 1971 were requested in terms of the principal location (State or outlying area) where the work was performed by the prime contractor, grantee, or intramural organization. Where this information was not available in their records, the respondents were asked to assign the obligations to the State, outlying area, etc. where the prime contractor, grantee, or intramural organization was located.

c. Obligations were reported for research and development as a combined amount.

d. Specifically omitted from the survey were R&D obligations to foreign performers and obligations for R&D plant used in support of foreign performers.

e. In addition to obtaining data on a prime contractor or grantee basis, the survey requested information on the geographic distribution of 1971 first-tier subcontracting under each new and continuing prime contract or grant for which $20 million or more was obligated in 1971.

Part II. Scientific and Technical Information

Scientific and technical information consists of knowledge or data resulting from the conduct of research and development, or knowledge or data required for organizing, administering, or performing research and development. It encompasses any information in recorded or other communicable form which presents the status, progress, or results of research and development in science or technology.

Exclusions:

(a) training costs for personnel engaged in scientific and technical information activities;

(b) raw scientific and technical data that have not been processed for use by scientific personnel engaged in research and development (included in part I of this survey);

(c) statistical and general-purpose data that are collected and organized for other than specific use in research and development;

(d) information that has been prepared primarily to inform or instruct the general public or others below the graduate or professional level of scientific activity.

Scientific and technical information activities include all management, administrative, R&D, and operational efforts directed to the planning, support, control, and improvement of the functions or tasks that deal with the acquisition, processing, handling, and communication of scientific and technical information. These may include the acquisition, maintenance, or rental of special equipment primarily for use in connection with scientific and technical information activities.

Categories of Scientific and Technical Information Activity

(1) PUBLICATION AND DISTRIBUTION

a. **Publication and distribution.** This subcategory includes two activities.

Publication includes all document production tasks performed after the author's manuscript or similar initial recording of the information has been finished and leading to but not including initial issuance or distribution of the finished document. Examples of publication activities: evaluation of a manuscript or patent; professional writing; technical or copy editing and revising not performed by the author, abstractor, or bibliographer; technical drawing and artwork; preparation of final copy for printing or other reproduction; also composing, typesetting, proofreading, display, illustrating, photographing, layout, makeup, printing, mimeographing, and photoduplication.

These publication activities may be concerned with any of the following: data compliations, proceedings of conferences and symposia, specifications and manuals used in the R&D process, technical reports, journal articles, monographs, reviews, dissertations, summaries, abstracts, bibliographies, indexes, special reports, patents, reference books, and treatises.

Distribution includes functions related to the initial transmission or dissemination of newly documented scientific and technical information from source to user, for example, mailing, shipping, and maintenance of controls.

Excluded from category 1 are professional efforts involved in the compilation and preparation of reference documents or bibliographies. These activities are included under category 2, below. Also excluded are audiovisual aids, such as taped talks, slide presentations, and motion picture films. These are included under category 3, below.

b. **Support of publications** includes all page charges paid out of Federal funds to primary journals; special subscription arrangements to maintain primary journals; and grants or contracts for publication and distribution of journals, conference proceedings, monographs, or textbooks.

(2) DOCUMENTATION, REFERENCE AND INFORMATION SERVICES

a. **Library and reference services** include the acquisition, collection, exchange, loan, and storage of scientific and technical documentary materials. These may be books, periodicals, manuals, reports, and drawings, and such reference sources as abstract journals, indexes, and subject heading and title lists. This subcategory includes such activities as the organizing and processing of scientific and technical documentary materials. Such work may consist of: indexing, coding, filing, subject classifying, abstracting, announcing, listing, preparing bibliographies, reviewing, screening, documenting, and cataloging.

This category includes rental or acquisition and maintenance of computers and other equipment and costs of their operation. It includes special retrieval services provided in response to user needs (reprography, SDI, demand bibliographies, etc.), sale and loan of documentary materials, dissemination of documents via mail and personal visits, and liaison activities with users and other information services.

Documentation centers, depositories, clearinghouses, and libraries are included under this subcategory (a).

b. **Specialized information center services** (including technical information analysis center services) cover the collection, review, summarization, and evaluation of scientific and technical information and data in well-defined, specialized fields. They rapher; technical drawing and artwork; preparation of final copy for printing or other reproduction; also composing, typesetting, proofreading, display, illustrating, photographing, layout, make-up, printing, mimeographing, and photoduplication.

These publication activities may be concerned with any of the following: data compliations, proceedings of conferences and symposia, specifications and manuals used in the R&D process, technical reports, journal articles, monographs, reviews, dissertations, summaries, abstracts, bibliographies, indexes, special reports, patents, reference books, and treatises.

Distribution includes functions related to the initial transmission or dissemination of newly documented scientific and technical information from source to user, for example, mailing, shipping, and maintenance of controls.

Excluded from category 1 are professional efforts involved in the compilation and preparation of reference documents or bibliographies. These activities are included under category 2, below. Also excluded are audiovisual aids, such as taped talks, slide presentations, and motion picture films. These are included under category 3, below.

b. **Support of publications** includes all page charges paid out of Federal funds to primary journals; special subscription arrangements to maintain primary journals; and grants or contracts for publication and distribution of journals, conference proceedings, monographs, or textbooks.

(2) DOCUMENTATION, REFERENCE AND INFORMATION SERVICES

a. **Library and reference services** include the acquisition, collection, exchange, loan, and storage of scientific and technical documentary materials. These may be books, periodicals, manuals, reports, and drawings, and such reference sources as abstract journals, indexes, and subject heading and title lists. This subcategory includes such activities as the organizing and processing of scientific and technical documentary materials. Such work may consist of: indexing, coding, filing, subject classifying, abstracting, announcing, listing, preparing bibliographies, reviewing, screening, documenting, and cataloging.

This category includes rental or acquisition and maintenance of computers and other equipment and costs of their operation. It includes special retrieval services provided in response to user needs (reprography, SDI, demand bibliographies, etc.), sale and loan of documentary materials, dissemination of documents via mail and personal visits, and liaison activities with users and other information services.

Documentation centers, depositories, clearinghouses, and libraries are included under this subcategory (a).

b. **Specialized information center services** (including technical information analysis center services) cover the collection, review, summarization, and evaluation of scientific and technical information and data in well-defined, specialized fields. They include advisory and other user services. Specialized information centers may be either discipline- or mission-oriented. The services of these centers are distinguished from those of documentation centers, clearinghouses, and libraries, whose functions are primarily concerned with the handling of documents rather than with the technical information contained in the documents.

c. **Translations** include all costs involved in the translation of documents and other materials from one language to another in support of R&D activities; also the purchase of foreign journals and other materials to be translated.

(3) SYMPOSIA AND AUDIOVISUAL MEDIA

a. **Symposia and technical meetings** include all efforts directed to planning, scheduling, announcing, supporting, sponsoring, conducting, and attending symposia, conferences, and meetings primarily concerned with disseminating scientific and technical information. The travel and subsistence of participants in such symposia, conferences, and meetings are covered in these costs.

b. **Audiovisual media and other forms of nonprinted communication** refer to the costs of producing technical and documentary motion picture films, slides, and photographs for R&D purposes, as well as audio and visual aids, such as taped talks, television film, or visual magnetic tape. This category also includes exhibits but *excludes* media primarily intended for training or public information purposes.

(4) RESEARCH AND DEVELOPMENT IN INFORMATION SCIENCES, DOCUMENTATION AND INFORMATION SYSTEMS, TECHNIQUES AND DEVICES

This category includes the conduct and support of research and development of new and nonconventional methods, techniques, systems, and machines for improving scientific and technical information functions under each of the other three categories. Such support would include meetings related specifically to such R&D work.

It also includes the conduct and support of studies and surveys to identify broad and specific aspects of scientific information problems. Examples of activities included under this category are development and testing of machines, devices, and techniques for storage and retrieval of information and data; linguistics research focused on information processing; language and machine translation; information theory; automata theory; artificial intelligence; logic and switching theory; operations or systems research on scientific and technical information systems and processes; documentation or document storage and retrieval; library science; network design; studies of subject classification and indexing schemes; and studies of scientific and technical information communications systems.

Also included under this category are applicable R&D costs for improving, modernizing and renovating current scientific and technical information, data, and communication systems. Research and development conducted at documentation centers, libraries, and specialized information centers are included but not the costs associated with establishing new centers or systems once past the development stage. As soon as a new system moves out of the experimental phase and into the operational phase, its costs are included under the appropriate category and subcategory above (1, 2, or 3) and no longer under category 4.

CHANGES IN REPORTING

Responses from the agencies in this survey, as in the previous ones, reflect updating of estimates for the last 2 years of the previous report. Such updating is normal in the budgetary cycle. In addition, from time to time, responses have reflected reappraisals and revisions in classification of agencies' R&D operations. When this has occurred, the National Science Foundation has revised prior-year data to maintain consistency and comparability with the most recent reporting. Since no statistical inquiry is free of problems of concepts and definitions for the respondents, revisions to improve the reporting are encouraged by NSF.

In this report, substantial changes in reporting by character of work, performer and field of science categories were made by the Department of Transportation and the National Institutes of Health. In both cases, the changes were due partly to a reevaluation of the programs of these agencies and partly to the changing nature of their work. In the case of DOT the submissions for *Federal Funds* XXI were all prepared by a central DOT office rather than by the various subdivisions of the Department, as was done in the past. NIH also changed its reporting techniques for this year's submission, relying more on its central data system than its subdivisions for compilation purposes.

The comparison of fiscal year 1971 R&D obligations by character of work reported by DOT for *Federal Funds* XXI with those reported for *Federal Funds* XX are as follows:

FY 1971 obligations

(Millions of dollars)

	FF XX	FF XXI
Research and development	$437	$483
Basic research	21	a
Applied research	90	173
Development	326	309

[a] Less than $0.5 million

The significant changes in the amounts reported by DOT for basic research and applied research in turn affected the performer and field of science data. In terms of performers, intramural basic research showed the largest decrease (from $13 million in FF XX to $62 thousand in FF XXI). For applied research the largest increases were for the industrial sector (from $31 million to $89 million) and for intramural performers (from $32 million to $53 million). In terms of fields of science, the major changes for basic research were in the environmental sciences (oceanography dropped from $12 million in FF XX for fiscal year 1971 to $43 thousand in FF XXI) and in the engineering sciences (from $8 million to $174 thousand). For applied research the major change was in the engineering sciences (from $68 million in FF XX to $153 million in FF XXI).

For NIH, the overall totals for 1971 revealed a lower figure for basic research in the FF XXI report than in the FF XX report ($327 million instead of $372 million) but scarcely any change for applied research. The development total, however, was revised upward in the FF XXI report (from $8 million to $55 million). NIH also shifted its research dollars within the performer categories as follows:

FY 1971 obligations

(Millions of dollars)

	FF XX	FF XXI
Federal intramural		
Basic research	$115	$ 43
Applied research	89	152
Universities and colleges		
Basic research	209	232
Applied research	392	345
Other nonprofit institutions		
Basic research	26	41
Applied research	117	97

NIH reporting for FF XXI also revealed differences in the distribution of basic research and applied research for the life sciences as follows:

FY 1971 obligations

(Millions of dollars)

	Basic research		Applied research	
	FF XX	FF XXI	FF XX	FF XXI
Life sciences, total	$322	$300	$592	$567
Biological	189	186	–	117
Clinical medical	–	–	592	336
Other medical sciences	133	72	–	110
Life sciences, NEC	–	42	–	4

Both DOT and NIH indicated that it was not now feasible, under current reporting systems, to determine what changes should be made in prior year R&D totals. Consequently, prior year funding data reported by these agencies have not been revised in this volume.

basic research showed the largest decrease (from $13 million in FF XX to $62 thousand in FF XXI). For applied research the largest increases were for the industrial sector (from $31 million to $89 million) and for intramural performers (from $32 million to $53 million). In terms of fields of science, the major changes for basic research were in the environmental sciences (oceanography dropped from $12 million in FF XX for fiscal year 1971 to $43 thousand in FF XXI) and in the engineering sciences (from $8 million to $174 thousand). For applied research the major change was in the engineering sciences (from $68 million in FF XX to $153 million in FF XXI).

For NIH, the overall totals for 1971 revealed a lower figure for basic research in the FF XXI report than in the FF XX report ($327 million instead of $372 million) but scarcely any change for applied research. The development total, however, was revised upward in the FF XXI report (from $8 million to $55 million). NIH also shifted its research dollars within the performer categories as follows:

FY 1971 obligations

(Millions of dollars)

	FF XX	FF XXI
Federal intramural		
Basic research	$115	$ 43
Applied research	89	152
Universities and colleges		
Basic research	209	232
Applied research	392	345
Other nonprofit institutions		
Basic research	26	41
Applied research	117	97

NIH reporting for FF XXI also revealed differences in the distribution of basic research and applied research for the life sciences as follows:

FY 1971 obligations

(Millions of dollars)

	Basic research		Applied research	
	FF XX	FF XXI	FF XX	FF XXI
Life sciences, total	$322	$300	$592	$567
Biological	189	186	–	117
Clinical medical	–	–	592	336
Other medical sciences	133	72	–	110
Life sciences, NEC	–	42	–	4

Both DOT and NIH indicated that it was not now feasible, under current reporting systems, to determine what changes should be made in prior year R&D totals. Consequently, prior year funding data reported by these agencies have not been revised in this volume.

LIMITATIONS OF THE DATA

Funds for research, development, and other scientific activities are reported on a three-year basis comparable with the 1973 Budget, upon which the data are based. The respondents have reconciled the data reported here with amounts for scientific activities shown in *The Budget of the United States Government, Fiscal Year 1973*. The amounts reported for each year indicate the obligations or expenditures incurred in that year, regardless of when the funds were authorized or received by an agency and regardless of whether the funds were identified in the agency's budget specifically for research, development, R&D plant, or scientific and technical information.

Data submitted by the Federal agencies for 1971 are considered to be actual since they represent essentially completed transactions. Amounts reported for 1972 and 1973 are estimates in that they are subject to further appropriation, apportionment, or allocation decisions. The actual effects of these and other later actions on 1972 and 1973 expenditures and obligations will be reflected in next year's report.

It is important to bear in mind that subjective determinations are often necessary in classifying the data. Because of the scope of research and development and its multidisciplinary nature, it is difficult to establish criteria for allocating effort on an objective basis among the character-of-work categories and the various fields of science. Also, funds for scientific activities may not be specifically identified in an agency's budget. On the other hand, in order to meet survey requirements, the participating agencies over the years have developed increasingly consistent bases for classifying scientific data. Any data revisions resulting from changes in an agency's reporting practices have been incorporated into the historical data to improve the comparability and consistency of the statistical series.

In some cases it has not been possible to report the full cost of research and development. For example, the headquarters costs of planning and administering R&D programs of DOD and AEC are not included in these reports because these agencies have indicated that it is administratively impracticable to identify the amounts.

R&D plant data reported here are to some extent understated because of the difficulty encountered by some agencies in identifying and reporting this information, particularly in the case of DOD and NASA. While DOD reports obligations for R&D plant funded by its construction appropriation, it is able to identify only a small portion of the amount of R&D plant support included in R&D contracts that were funded from its have indicated that it is administratively impracticable to identify the amounts.

In the area of scientific and technical information, extramural obligations are limited to funds allocated for grants and contracts that are primarily for the support of scientific and technical information activities. As in prior volumes of this series, extramural funds for information activities performed as a supplemental, supporting service under grants or contracts primarily for research and development have been excluded because it is usually not feasible for the respondent to determine what portion of an R&D grant or contract actually supports information activities. Some R&D projects receive support from several agencies through a number of grants and/or contracts, and in such instances, related information activities may pertain to the overall R&D project and may not be identifiable under a particular grant or contract.

RELATION TO OTHER REPORTS

(1) FEDERAL SUPPORT TO UNIVERSITIES AND COLLEGES

The Committee on Academic Science and Engineering (CASE) of the Federal Council for Science and Technology prepares reports relating to Federal support of academic science. Both the CASE and *Federal Funds* reports provide data on Federal obligations for research and development and R&D plant to universities and colleges and to university-administered Federally Funded Research and Development Centers (FFRDC's). The CASE report, however, is based on obligations of Federal agencies to each individual academic institution, while the *Federal Funds* report is concerned with obligations to universities and colleges as a performer group. Further, the CASE study is based on reports of only 14 agencies - the Departments of Agriculture, Commerce, Defense, Health, Education, and Welfare, Housing and Urban Development, the Interior, Labor and Transportation; the Atomic Energy Commission; the Environmental Protection Agency; the National Aeronautics and Space Administration; the National Science Foundation; the Agency for International Development; and the Office of Economic Opportunity - while *Federal Funds* is composed of obligations of all agencies. (The 14 respondents for CASE, however, account for more than 99 percent of the Federal R&D total to universities and colleges and virtually all obligations to university-administered FFRDC's.) In addition, the CASE report includes funds for other activities, such as science education and nonscience support.

(2) SPECIAL ANALYSES, BUDGET OF THE UNITED STATES

In a section of *Special Analyses, Budget of the United States Government*, the Office of Management and Budget (OMB) publishes estimates of obligations and expenditures for research, development, and R&D plant. However, the data in "Special Analysis R, Federal Research and Development Programs" in the 1973 Budget do not provide as much detail on character of work or performers as *Federal Funds* and provide no information on fields of science or geographic distribution.

However, "Special Analysis R" and *Federal Funds* utilize the same definitions for research and development and for R&D plant. The estimates for research and development published in the two reports are comparable even though differences do exist. The differences between the two reports are as follows:

Total R&D obligations

(Billions of dollars)

	FY 1971	FY 1972	FY 1973
Federal Funds	$ 15.5	$ 16.8	$ 17.8
Special Analysis R	15.1	16.4	17.8

Most of the difference in 1971 arose from the fact that the *Federal Funds* report includes R&D obligations for DOT's supersonic transport program whereas the special analysis report did not include such funds.

The variance in 1972 totals stems largely from the different reporting practices followed by DOD. For *Federal Funds*, DOD reported R&D funds in terms of obligations while for the special analysis it reported in terms of budget plan.

The differences between the two reports with respect to R&D obligations to universities and colleges are as follows:

R&D obligations to universities and colleges

(Millions of dollars)

	FY 1971	FY 1972	FY 1973
Federal Funds	$ 1,644	$ 1,915	$ 2,126
Special Analysis R	1,747	2,020	2,257

The lower *Federal Funds* totals for R&D obligations to universities and colleges in each of the 3 years are primarily the result of revisions made after data were provided for the special analysis, particularly in the case of NIH.

(3) AN ANALYSIS OF FEDERAL R&D FUNDING BY FUNCTION, 1963-73

NSF has published a report under the above title, providing an analysis of Federal R&D expenditures by functional categories. The function report compares total Federal outlays by budget functions with Federal R&D expenditures within each of the functions for fiscal years 1963 through 1973. The annual *Federal Funds* series, by contrast, reports on Federal R&D expenditures by agencies but not by functional categories.

The R&D expenditure data for 1963-70 in the function report were based on information submitted by the agencies for the *Federal Funds* series. Thus, the overall R&D expenditures are the same for these years in both reports. However, the function report was prepared before agency responses to *Federal Funds*, Volume XXI were received, and therefore, the 1971-73 R&D expenditures had to be based on information submitted by the agencies to OMB for its special analysis of R&D programs, with
certain adjustment
expenditure totals
slightly from the
XXI.

(4) OTHER REPO

Individual agen
purposes other tha
conducted. Definit
other purposes ma
with the data trans

SOURCES

Data on R&D
were compiled by
OMB). Later data
been published in
justments have be
latest reporting con

Supplementing
Foundation's surve
were used for the
statements submit
testimony presente
and the House, th
tacts with agency r

The different
amounts being rep

a. The obligati
ties and colleges re
to $1,645 million
reported for CASE
variances in the am
HEW. The *Federal*
of Health included
and in CASE they
support for science
higher Office of E
contributed signifi
difference. For *Fe*
university and coll
certain State resear
ever, for the CAS
available and, con
the CASE tabulatio

A difference in
contributing to th
Federal Funds NS
ment program fun
CASE all such fun
for science" catego

However, "Special Analysis R" and *Federal Funds* utilize the same definitions for research and development and for R&D plant. The estimates for research and development published in the two reports are comparable even though differences do exist. The differences between the two reports are as follows:

Total R&D obligations

(Billions of dollars)

	FY 1971	FY 1972	FY 1973
Federal Funds	$ 15.5	$ 16.8	$ 17.8
Special Analysis R	15.1	16.4	17.8

Most of the difference in 1971 arose from the fact that the *Federal Funds* report includes R&D obligations for DOT's supersonic transport program whereas the special analysis report did not include such funds.

The variance in 1972 totals stems largely from the different reporting practices followed by DOD. For *Federal Funds,* DOD reported R&D funds in terms of obligations while for the special analysis it reported in terms of budget plan.

The differences between the two reports with respect to R&D obligations to universities and colleges are as follows:

R&D obligations to universities and colleges

(Millions of dollars)

	FY 1971	FY 1972	FY 1973
Federal Funds	$ 1,644	$ 1,915	$ 2,126
Special Analysis R	1,747	2,020	2,257

The lower *Federal Funds* totals for R&D obligations to universities and colleges in each of the 3 years are primarily the result of revisions made after data were provided for the special analysis, particularly in the case of NIH.

(3) AN ANALYSIS OF FEDERAL R&D FUNDING BY FUNCTION, 1963-73

NSF has published a report under the above title, providing an analysis of Federal R&D expenditures by functional categories. The function report compares total Federal outlays by budget functions with Federal R&D expenditures within each of the functions for fiscal years 1963 through 1973. The annual *Federal Funds* series, by contrast, reports on Federal R&D expenditures by agencies but not by functional categories.

The R&D expenditure data for 1963-70 in the function report were based on information submitted by the agencies for the *Federal Funds* series. Thus, the overall R&D expenditures are the same for these years in both reports. However, the function report was prepared before agency responses to *Federal Funds,* Volume XXI were received, and therefore, the 1971-73 R&D expenditures had to be based on information submitted by the agencies to OMB for its special analysis of R&D programs, with certain adjustments (see above). Consequently, the overall R&D expenditure totals for 1971-73 in the function report differ slightly from the expenditure totals in *Federal Funds,* Volume XXI.

(4) OTHER REPORTS

Individual agencies may classify their R&D programs for purposes other than those for which the *Federal Funds* survey is conducted. Definitions and guidelines that are suitable to those other purposes may result in information that is not comparable with the data transmitted to the Foundation for *Federal Funds.*

SOURCES

Data on R&D funds in this report for years prior to 1952 were compiled by the Bureau of the Budget (which later became OMB). Later data were based on NSF surveys. These data have been published in previous issues of this series, but certain adjustments have been made to reflect comparability with the latest reporting concepts evolved by the agencies.

Supplementing the statistical data collected through the Foundation's survey of Federal agencies, a variety of sources were used for the text of this report, including the narrative statements submitted by the agencies, published records of testimony presented by the agencies to committees of the Senate and the House, the 1973 Budget Appendix, and personal contacts with agency respondents.

The different reporting procedures have led to different amounts being reported by CASE and *Federal Funds* as follows:

a. The obligations for research and development to universities and colleges reported for *Federal Funds* in 1971 amounted to $1,645 million, or $100 million more than the amount reported for CASE. Most of this difference can be attributed to variances in the amounts reported by certain subdivisions within HEW. The *Federal Funds* R&D total for the National Institutes of Health included funds for General Research Support grants, and in CASE they were under the category entitled "general support for science," which is defined to cover such grants. A higher Office of Education R&D total in *Federal Funds* also contributed significantly to the overall *Federal Funds*-CASE difference. For *Federal Funds* OE was able to identify the university and college sector as the final performing sector for certain State research grants and report them accordingly. However, for the CASE report this performer information was not available and, consequently, these funds were not included in the CASE tabulations.

A difference in reported totals for NSF was another factor contributing to the overall higher *Federal Funds* total. For *Federal Funds* NSF reported that portion of science development program funds which supported R&D activities, while for CASE all such funds were reported under the "general support for science" category.

b. The R&D obligation total to university-administered FFRDC's reported for *Federal Funds* was $729 million in 1971, or $66 million less than reported for CASE. The $55 million subcontracted by NASA's Jet Propulsion Laboratory accounted for most of this difference. For *Federal Funds* this amount is included in ultimate-performer categories (mainly industry), while for CASE the subcontracted amount was included in the R&D obligations to FFRDC's administered by universities.

c. The total R&D plant obligations to FFRDC's administered by universities and colleges reported for *Federal Funds* was $179 million in 1971, or $6 million less than reported for CASE. Most of this difference arose from AEC reporting "costs" for CASE and "obligations" for *Federal Funds*.

The following factors should also be considered in comparing the data appearing in the two reports:

(a) For *Federal Funds* each agency includes in its own obligations the amounts transferred to other agencies for furtherance of its work, and the receiving agencies do not report funds transferred to them. On the other hand, in the CASE survey, the data are reported by the agency that made the *final* distribution of the funds to a given institution. Thus, for the CASE survey, agencies included funds received from other agencies, and excluded funds transferred to other agencies, the reverse of the *Federal Funds* process. While such transfers should balance each other out with no resulting changes in total R&D obligations, these varying reporting practices do add to the possibility of differences between the two reports.

(b) The CASE reports, in most instances, are prepared by other components within each agency than those which prepare the *Federal Funds* responses. Furthermore, the CASE data are collected several months earlier than the *Federal Funds* statistics. Although, in theory, these conditions in themselves should not lead to reporting differences, in practice differences do arise.

APPENDIX B

Federally Funded Research and Development Centers

FISCAL YEARS 1971-73

Department of Defense

Office of the Secretary of Defense

Administered by Other Nonprofit Institutions

Institute for Defense Analyses (IDA)

Department of the Army

Administered by Other Nonprofit Institutions

Human Resources Research Organization
Research Analysis Corporation (RAC)

Department of the Navy

Administered by Universities and Colleges

Applied Physics Laboratory (Johns Hopkins University)
Applied Physics Laboratory (University of Washington)
Center for Naval Analyses (University of Rochester)
Ordnance Research Laboratory (Pennsylvania State University)

Department of the Air Force

Administered by Universities and Colleges

Lincoln Laboratory (Massachusetts Institute of Technology)

Administered by Other Nonprofit Institutions

Aerospace Corporation
Analytic Services, Inc. (ANSER)
Electromagnetic Compatibility Analysis Center (Illinois Institute of Technology, Research Institute (IITRI))
MITRE Corporation
RAND Corporation

Department of Health, Education, and Welfare

Office of Education[1]

Administered by Universities and Colleges

Center for the Advanced Study of Educational Administration (University of Oregon)

Department of Defense

Office of the Secretary of Defense

Administered by Other Nonprofit Institutions

Institute for Defense Analyses (IDA)

Department of the Army

Administered by Other Nonprofit Institutions

Human Resources Research Organization
Research Analysis Corporation (RAC)

Department of the Navy

Administered by Universities and Colleges

Applied Physics Laboratory (Johns Hopkins University)
Applied Physics Laboratory (University of Washington)
Center for Naval Analyses (University of Rochester)
Ordnance Research Laboratory (Pennsylvania State University)

Department of the Air Force

Administered by Universities and Colleges

Lincoln Laboratory (Massachusetts Institute of Technology)

Administered by Other Nonprofit Institutions

Aerospace Corporation
Analytic Services, Inc. (ANSER)
Electromagnetic Compatibility Analysis Center (Illinois Institute of Technology, Research Institute (IITRI))
MITRE Corporation
RAND Corporation

epartment of Health, Education, nd Welfare

Office of Education[1]

Administered by Universities and Colleges

Center for the Advanced Study of Educational Administration (University of Oregon)
Center for Research and Development in Higher Education (University of California)
Center for Research and Development for Learning and Re-Education (University of Wisconsin)
Center for the Study of the Evaluation of Instructional Programs (University of California)
Center for the Study of Social Organization of Schools and the Learning Process (Johns Hopkins University)
Learning Research and Development Center (University of Pittsburgh)
Research and Development Center in Teacher Education (University of Texas)
Stanford Center for Research and Development in Teaching (Stanford University)

Administered by Other Nonprofit Institutions

Appalachia Educational Laboratory
Center for Educational Policy Research (Stanford Research Institute)
Center for Urban Education
Central Midwestern Regional Education Laboratory
Eastern Regional Institute for Education
Educational Development Center, Inc.
The Far West Laboratory for Educational Research and Development
Mid-Continent Regional Educational Laboratory
National Laboratory for Higher Education[2]
Northwest Regional Educational Laboratory
Policy Research Center (Syracuse University Research Corporation)
Research for Better Schools, Inc.
Southeastern Educational Laboratory
Southwest Educational Development Laboratory
Southwest Regional Laboratory for Educational Research and Development
Southwestern Cooperative Educational Laboratory
Upper Midwest Regional Educational Laboratory, Inc.

Atomic Energy Commission

Administered by Industrial Firms

Bettis Atomic Power Laboratory (Westinghouse Electric Corp.)

Hanford Engineering Development Laboratory (Westinghouse - Hanford Corp.)[3]

Knolls Atomic Power Laboratory (General Electric Company)

Mound Laboratory (Monsanto Research Corp.)

National Reactor Testing Station (Aerojet Nuclear Corp.)

Oak Ridge National Laboratory (Union Carbide Corp.)

Sandia Laboratory (Western Electric Co., Inc. – Sandia Corp.)

Savannah River Laboratory (E. I. duPont de Nemours & Co., Inc.)

Administered by Universities and Colleges

Ames Laboratory (Iowa State University of Science and Technology)

Argonne National Laboratory (University of Chicago and Argonne Universities Assn.)

Brookhaven National Laboratory (Associated Universities, Inc.)

Cambridge Electron Accelerator (Harvard University)

E.O. Lawrence Berkeley Laboratory (University of California)[4]

E. O. Lawrence Livermore Laboratory (University of California)[4]

Los Alamos Scientific Laboratory (University of California)

National Accelerator Laboratory (Universities Research Association, Inc.)

Oak Ridge Associated Universities

Plasma Physics Laboratory (Princeton University)

Princeton-Pennsylvania Accelerator (Princeton University)[5]

Stanford Linear Accelerator Center (Stanford University)

Administered by Other Nonprofit Institutions

Atomic Bomb Casualty Commission (National Academy of Sciences)

Pacific Northwest Laboratory (Battelle Memorial Institute)

National Aeronautics and Space Administration

Administered by Universities and Colleges

Jet Propulsion Laboratory (California Institute of Technology)

Space Radiation Effects Laboratory (College of William and Mary)

National Science Foundation

Administered by Universities and Colleges

National Astronomy and Ionosphere Center (Cornell University)[6]

Cerro Tololo Inter-American Observatory (Association of Universities for Research in Astronomy, Inc.)

Kitt Peak National Observatory (Association of Universities for Research in Astronomy, Inc.)

National Center for Atmospheric Research (University Corporation for Atmospheric Research)

National Radio Astronomy Observatory (Associated Universities, Inc.)

---

[1] In fiscal year 1973 the National Institute of Education assumed sponsorship of all these FFRDC's.

[2] Formerly Regional Educational Laboratory for the Carolinas and Virginia.

[3] Established in December 1971 to manage AEC's Liquid Metal Fast Breeder Reactor program that was formerly managed by the Pacific Northwest Laboratory under the WADCO Corp.

[4] In June 1971 the two laboratories of the former Lawrence Radiation Laboratory located at Berkeley and Livermore were administratively separated and renamed.

[5] Phased out as an FFRDC as of the end of fiscal year 1971.

[6] Formerly Arecibo Observatory.

APPENDIX C

Statistical Tables

Part I

Federal Funds for Research, Development, and R&D Plant

RESEARCH, DEVELOPMENT, AND R&D PLANT

Page
C-1. Overall summary, fiscal years 1971, 1972, and 1973 51
C-2. By agency, fiscal years 1971, 1972, and 1973 52

RESEARCH AND DEVELOPMENT – AGENCY, CHARACTER OF WORK, AND PERFORMER

C-3. By agency, fiscal years 1971, 1972, and 1973 54
C-4. By agency and character of work, fiscal year 1971 56
C-5. By agency and character of work, fiscal year 1972 (estimated) 58
C-6. By agency and character of work, fiscal year 1973 (estimated) 60
C-7. By agency and performer, fiscal year 1971 62
C-8. By agency and performer, fiscal year 1972 (estimated). 64
C-9. By agency and performer, fiscal year 1973 (estimated). 66

TOTAL RESEARCH – AGENCY, PERFORMER, AND FIELD OF SCIENCE

C-10. By agency and performer, fiscal year 1971 68
C-11. By agency and performer, fiscal year 1972 (estimated). 70
C-12. By agency and performer, fiscal year 1973 (estimated). 72
C-13. By detailed field of science, fiscal years 1971, 1972, and 1973 74
C-14. By agency and field of science, fiscal year 1971 75
C-15. By agency and field of science, fiscal year 1972 (estimated). 77
C-16. By agency and field of science, fiscal year 1973 (estimated). 79
C-17. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1971 81
C-18. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 82
C-19. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 83
C-20. Life and environmental sciences, by agency and detailed field of science, fiscal year 1971 84
C-21. Life and environmental sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 85
C-22. Life and environmental sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 86
C-23. Engineering, by agency and detailed field of science, fiscal year 1971. 87

RESEARCH, DEVELOPMENT, AND R&D PLANT

Page
C-1. Overall summary, fiscal years 1971, 1972, and 1973 51
C-2. By agency, fiscal years 1971, 1972, and 1973 52

RESEARCH AND DEVELOPMENT – AGENCY, CHARACTER OF WORK, AND PERFORMER

C-3. By agency, fiscal years 1971, 1972, and 1973 54
C-4. By agency and character of work, fiscal year 1971 56
C-5. By agency and character of work, fiscal year 1972 (estimated) 58
C-6. By agency and character of work, fiscal year 1973 (estimated) 60
C-7. By agency and performer, fiscal year 1971 62
C-8. By agency and performer, fiscal year 1972 (estimated) 64
C-9. By agency and performer, fiscal year 1973 (estimated) 66

TOTAL RESEARCH – AGENCY, PERFORMER, AND FIELD OF SCIENCE

C-10. By agency and performer, fiscal year 1971 68
C-11. By agency and performer, fiscal year 1972 (estimated) 70
C-12. By agency and performer, fiscal year 1973 (estimated) 72
C-13. By detailed field of science, fiscal years 1971, 1972, and 1973 74
C-14. By agency and field of science, fiscal year 1971 75
C-15. By agency and field of science, fiscal year 1972 (estimated) 77
C-16. By agency and field of science, fiscal year 1973 (estimated) 79
C-17. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1971 81
C-18. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 82
C-19. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 83
C-20. Life and environmental sciences, by agency and detailed field of science, fiscal year 1971 84
C-21. Life and environmental sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 85
C-22. Life and environmental sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 86
C-23. Engineering, by agency and detailed field of science, fiscal year 1971 87
Page
C-24. Engineering, by agency and detailed field of science, fiscal year 1972 (estimated) 88
C-25. Engineering, by agency and detailed field of science, fiscal year 1973 (estimated) 89
C-26. Social sciences, by agency and detailed field of science, fiscal year 1971 90
C-27. Social sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 91
C-28. Social sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 92

BASIC RESEARCH – AGENCY, PERFORMER, AND FIELD OF SCIENCE

C-29. By agency and performer, fiscal year 1971 93
C-30. By agency and performer, fiscal year 1972 (estimated) 94
C-31. By agency and performer, fiscal year 1973 (estimated) 95
C-32. By detailed field of science, fiscal years 1971, 1972, and 1973 96
C-33. By agency and field of science, fiscal year 1971 97
C-34. By agency and field of science, fiscal year 1972 (estimated) 98
C-35. By agency and field of science, fiscal year 1973 (estimated) 99
C-36. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1971 100
C-37. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 101
C-38. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 102
C-39. Life and environmental sciences, by agency and detailed field of science, fiscal year 1971 103
C-40. Life and environmental sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 104
C-41. Life and environmental sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 105
C-42. Engineering, by agency and detailed field of science, fiscal year 1971 106
C-43. Engineering, by agency and detailed field of science, fiscal year 1972 (estimated) 107
C-44. Engineering, by agency and detailed field of science, fiscal year 1973 (estimated) 108
C-45. Social sciences, by agency and detailed field of science, fiscal year 1971 109
C-46. Social sciences, by agency and detailed field of science, fiscal year 1972 (estimated) 110
C-47. Social sciences, by agency and detailed field of science, fiscal year 1973 (estimated) 111

APPLIED RESEARCH – AGENCY, PERFORMER, AND FIELD OF SCIENCE

Page
C-48. By agency and performer, fiscal year 1971 . . . 112
C-49. By agency and performer, fiscal year 1972 (estimated) . . . 114
C-50. By agency and performer, fiscal year 1973 (estimated) . . . 116
C-51. By detailed field of science, fiscal years 1971, 1972, and 1973 . . . 118
C-52. By agency and field of science, fiscal year 1971 . . . 119
C-53. By agency and field of science, fiscal year 1972 (estimated) . . . 121
C-54. By agency and field of science, fiscal year 1973 (estimated) . . . 123
C-55. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1971 . . . 125
C-56. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1972 (estimated) . . . 126
C-57. Psychology and physical sciences, by agency and detailed field of science, fiscal year 1973 (estimated) . . . 127
C-58. Life and environmental sciences, by agency and detailed field of science, fiscal year 1971 . . . 128
C-59. Life and environmental sciences, by agency and detailed field of science, fiscal year 1972 (estimated) . . . 129
C-60. Life and environmental sciences, by agency and detailed field of science, fiscal year 1973 (estimated) . . . 130
C-61. Engineering, by agency and detailed field of science, fiscal year 1971 . . . 131
C-62. Engineering, by agency and detailed field of science, fiscal year 1972 (estimated) . . . 132
C-63. Engineering, by agency and detailed field of science, fiscal year 1973 (estimated) . . . 133
C-64. Social sciences, by agency and detailed field of science, fiscal year 1971 . . . 134
C-65. Social sciences, by agency and detailed field of science, fiscal year 1972 (estimated) . . . 135
C-66. Social sciences, by agency and detailed field of science, fiscal year 1973 (estimated) . . . 136

DEVELOPMENT – AGENCY AND PERFORMER

C-67. By agency and performer, fiscal year 1971 . . . 137
C-68. By agency and performer, fiscal year 1972 (estimated) . . . 138
C-69. By agency and performer, fiscal year 1973 (estimated) . . . 139

R&D PLANT

C-70. By agency, fiscal year 1971, 1972, and 1973 . . . 140
Page
C-71. By agency and performer of the R&D the plant supports, fiscal year 1971 . . . 141
C-72. By agency and performer of the R&D the plant supports, fiscal year 1972 (estimated) . . . 142
C-73. By agency and performer of the R&D the plant supports, fiscal year 1973 (estimated) . . . 143

FOREIGN PERFORMERS – RESEARCH AND DEVELOPMENT

C-74. By region, country, and agency, fiscal year 1971 . . . 144
C-75. By region, country, and agency, fiscal year 1972 (estimated) . . . 145

FOREIGN PERFORMERS – BASIC RESEARCH

C-76. By region, country, and agency, fiscal year 1971 . . . 146
C-77. By region, country, and agency, fiscal year 1972 (estimated) . . . 147

SPECIAL FOREIGN CURRENCY PROGRAM

C-78. For research and development, by agency, fiscal years 1971, 1972, and 1973 . . . 148
C-79. For basic research, by agency, fiscal years 1971, 1972, and 1973 . . . 149
C-80. For applied research, by agency, fiscal years 1971, 1972, and 1973 . . . 150
C-81. For development, by agency, fiscal years 1971, 1972, and 1973 . . . 151

GEOGRAPHIC DISTRIBUTION – RESEARCH AND DEVELOPMENT AND R&D PLANT

C-82. Research, development, and R&D plant, by geographic division and State, fiscal year 1971 152
C-83. Research and development, by State and performer, fiscal year 1971 . . . 153
C-83A. Percent distribution to each performer, by State, fiscal year 1971 . . . 154
C-83B. Percent distribution to each State, by performer, fiscal year 1971 . . . 155
C-84. Research and development, by State and agency, fiscal year 1971 . . . 156
C-84A. Percent distribution of each agency, by State, fiscal year 1971 . . . 157
C-84B. Percent distribution of each State, by agency, fiscal year 1971 . . . 158
C-85. Research and development, by geographic division, State, agency, and performer, fiscal year 1971 . . . 159
C-86. R&D plant, by geographic division, State, and performer supported, fiscal year 1971 . . . 170
C-87. R&D plant, by geographic division, State, and agency, fiscal year 1971 . . . 171

Page
C-71. By agency and performer of the R&D the plant supports, fiscal year 1971 141
C-72. By agency and performer of the R&D the plant supports, fiscal year 1972 (estimated) 142
C-73. By agency and performer of the R&D the plant supports, fiscal year 1973 (estimated) 143

FOREIGN PERFORMERS – RESEARCH AND DEVELOPMENT

C-74. By region, country, and agency, fiscal year 1971 144
C-75. By region, country, and agency, fiscal year 1972 (estimated) 145

FOREIGN PERFORMERS – BASIC RESEARCH

C-76. By region, country, and agency, fiscal year 1971 146
C-77. By region, country, and agency, fiscal year 1972 (estimated) 147

SPECIAL FOREIGN CURRENCY PROGRAM

C-78. For research and development, by agency, fiscal years 1971, 1972, and 1973 148
C-79. For basic research, by agency, fiscal years 1971, 1972, and 1973 149
C-80. For applied research, by agency, fiscal years 1971, 1972, and 1973 150
C-81. For development, by agency, fiscal years 1971, 1972, and 1973 151

GEOGRAPHIC DISTRIBUTION – RESEARCH AND DEVELOPMENT AND R&D PLANT

C-82. Research, development, and R&D plant, by geographic division and State, fiscal year 1971 152
C-83. Research and development, by State and performer, fiscal year 1971 153
C-83A. Percent distribution to each performer, by State, fiscal year 1971 154
C-83B. Percent distribution to each State, by performer, fiscal year 1971 155
C-84. Research and development, by State and agency, fiscal year 1971 156
C-84A. Percent distribution of each agency, by State, fiscal year 1971 157
C-84B. Percent distribution of each State, by agency, fiscal year 1971 158
C-85. Research and development, by geographic division, State, agency, and performer, fiscal year 1971 159
C-86. R&D plant, by geographic division, State, and performer supported, fiscal year 1971 170
C-87. R&D plant, by geographic division, State, and agency, fiscal year 1971 171

FEDERAL INTRAMURAL PERSONNEL COSTS

Page
C-88. Total research and development, by agency, fiscal years 1971, 1972, and 1973 172
C-89. Basic research, by agency, fiscal years 1971, 1972, and 1973 174
C-90. Applied research, by agency, fiscal years 1971, 1972, and 1973 175
C-91. Development, by agency, fiscal years 1971, 1972, and 1973 177

HISTORICAL DATA

Expenditures

C-92. Research, development, and R&D plant, by agency, fiscal years 1940-73. 178
C-93. Research and development, by agency, fiscal years 1952-73 180
C-94. R&D plant, by agency, fiscal years 1952-73 181

Obligations

C-95. Research, development, and R&D plant, by agency, fiscal years 1947-73 182
C-96. Research and development, by agency, fiscal years 1947-73. 183
C-97. R&D plant, by agency, fiscal years 1947-73 184
C-98. Research and development, by character of work and R&D plant, fiscal years 1956-73 185
C-99. Total research, by selected agency, fiscal years 1956-73 185
C-100. Basic research, by selected agency, fiscal years 1952-73 186
C-101. Applied research, by selected agency, fiscal years 1956-73. 186
C-102. Development, by selected agency, fiscal years 1956-73 187
C-103. Research and development, by performer, fiscal years 1955-73 187
C-104. Total research, by performer, fiscal years 1963-73 188
C-105. Basic research, by performer, fiscal years 1958-73 188
C-106. Applied research, by performer, fiscal years 1963-73 188
C-107. Development, by performer, fiscal years 1963-73 189
C-108. Total research, by field of science, fiscal years 1956-73 189
C-109. Basic research, by field of science, fiscal years 1956-73 190
C-110. Applied research, by field of science, fiscal years 1956-73. 190
C-111. Research and development, by geographic division and State, fiscal years 1963, 1965, 1968, 1969, 1970, and 1971 191
C-112. R&D plant, by geographic division and State, fiscal years 1963, 1965, 1968, 1969, 1970, and 1971 192

NOTES

- The source of data is the National Science Foundation, except where noted on individual tables.
- Estimates for 1973 are based on *The Budget, FY 1973,* as submitted to Congress, and do not reflect subsequent appropriation and apportionment actions.
- Asterisks appearing in lieu of figures indicate that the amounts are less than $50,000.
- The abbreviation "FFRDC" appearing in statistical tables refers to Federally Funded Research and Development Centers.
- Defense Agencies within the Department of Defense include agencies such as the Advanced Research Projects Agency, the National Security Agency, the Defense Nuclear Agency, and the Defense Communications Agency.
- Departmentwide Funds of the Department of Defense include the Emergency Fund and Civil Defense.
- The Atomic Energy Commission's R&D data reflect accrued obligations and costs.
- In tables showing extramural performers, obligations to agricultural experiment stations are included under obligations to universities and colleges.
- The Social and Economic Statistics Administration, Department of Commerce, was established in fiscal year 1972 and includes the former Bureau of the Census and Office of Business Economics.
- The Employment Standards Administration and the Occupational Safety and Health Administration, Department of Labor, in prior years were included in the former Workplace Standards Administration.
- The National Institute of Education, which was established within the Department of Health, Education, and Welfare in fiscal year 1973, will assume a major portion of the R&D activities of the Office of Education.

Table C-1. Summary of Federal funds for research, development, and R&D plant, fiscal years 1971, 1972,

[Millions of dollars]

Item	Actual	Estimates	
	1971	1972	1973
TOTAL EXPENDITURES FOR RESEARCH, DEVELOPMENT, AND R&D PLANT	15,992.4	16,733.9	17,326.9
Research and Development	15,379.7	16,093.6	16,632.4
R&D Plant	612.7	640.3	694.5
TOTAL OBLIGATIONS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT	16,160.8	17,485.3	18,626.8
Research and Development	15,549.5	16,820.9	17,790.8
Total Research	6,150.2	6,749.4	7,296.9
Basic Research	2,132.3	2,395.2	2,604.3
Applied Research	4,017.9	4,354.3	4,692.6
Development	9,399.3	10,071.5	10,493.9
R&D Plant	611.2	664.4	836.0
Research and Development			
Performers			
Federal intramural[a]	4,165.6	4,509.1	4,597.8
Industrial firms	7,630.5	8,120.6	8,682.9
FFRDC's administered by industrial firms	480.2	515.1	553.3
Universities and colleges	1,644.5	1,915.3	2,126.1
FFRDC's administered by universities and colleges	728.9	782.7	817.9
Nonprofit institutions	485.6	510.3	484.2
FFRDC's administered by nonprofit institutions	210.2	197.4	207.5
Other domestic performers	141.1	187.5	227.5
Foreign	63.1	82.8	93.6
Research			
Performers			
Federal intramural[a]	2,033.2	2,171.9	2,273.0
Industrial firms	1,626.9	1,705.2	1,913.9
FFRDC's administered by industrial firms	75.7	76.2	80.5
Universities and colleges	1,495.7	1,757.4	1,953.1
FFRDC's administered by universities and colleges	398.9	442.0	467.1
Nonprofit institutions	314.3	360.5	320.3
FFRDC's administered by nonprofit institutions	52.4	52.2	67.7
Other domestic performers	100.5	121.8	145.6
Foreign	52.7	62.2	75.7
Fields of science			
Life sciences	1,673.3	1,967.6	2,126.0
Psychology	115.7	140.5	144.6
Physical sciences	1,042.6	1,116.1	1,230.9
Environmental sciences	677.5	764.3	804.6
Mathematics	121.7	138.7	142.2
Engineering	2,111.2	2,163.2	2,258.1
Social sciences	305.7	330.5	403.0
Other sciences	102.6	128.6	187.5
Basic Research			
Performers			
Federal intramural[a]	534.6	577.9	590.3
Industrial firms	412.5	469.5	521.3
FFRDC's administered by industrial firms	29.2	30.3	30.4
Universities and colleges	794.4	913.4	1,024.0
FFRDC's administered by universities and colleges	260.0	286.5	301.3
Nonprofit institutions	72.4	79.3	82.3
FFRDC's administered by nonprofit institutions	2.1	5.5	11.9

Item
Basic research – Continued
Other domestic performers
Foreign
Fields of science
Life sciences
Psychology
Physical sciences
Environmental sciences
Mathematics
Engineering
Social sciences
Other sciences
Applied research
Performers
Federal intramural[a]
Industrial firms
FFRDC's administered by industrial fi
Universities and colleges
FFRDC's administered by universities
Nonprofit institutions
FFRDC's administered by nonprofit in
Other domestic performers
Foreign
Fields of science
Life sciences
Psychology
Physical sciences
Environmental sciences
Mathematics
Engineering
Social sciences
Other sciences
Development
Performers
Federal intramural[a]
Industrial firms
FFRDC's administered by industrial fi
Universities and colleges
FFRDC's administered by universities
Nonprofit institutions
FFRDC's administered by nonprofit in
Other domestic performers
Foreign
R&D Plant
Performers supported
Federal intramural
Industrial firms
FFRDC's administered by industrial fi
Universities and colleges
FFRDC's administered by universities
Nonprofit institutions
FFRDC's administered by nonprofit in
Other domestic performers
Foreign

[a] Intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

SOURCE: National Science Foundation

Table C-1. Summary of Federal funds for research, development, and R&D plant, fiscal years 1971, 1972, 1973

[Millions of dollars]

	Actual 1971	Estimates 1972	Estimates 1973
DEVELOPMENT,	15,992.4	16,733.9	17,326.9
	15,379.7	16,093.6	16,632.4
	612.7	640.3	694.5
ELOPMENT,	16,160.8	17,485.3	18,626.8
	15,549.5	16,820.9	17,790.8
	6,150.2	6,749.4	7,296.9
	2,132.3	2,395.2	2,604.3
	4,017.9	4,354.3	4,692.6
	9,399.3	10,071.5	10,493.9
	611.2	664.4	836.0
	4,165.6	4,509.1	4,597.8
	7,630.5	8,120.6	8,682.9
	480.2	515.1	553.3
	1,644.5	1,915.3	2,126.1
olleges	728.9	782.7	817.9
	485.6	510.3	484.2
tions	210.2	197.4	207.5
	141.1	187.5	227.5
	63.1	82.8	93.6
	2,033.2	2,171.9	2,273.0
	1,626.9	1,705.2	1,913.9
	75.7	76.2	80.5
	1,495.7	1,757.4	1,953.1
olleges	398.3	442.0	467.1
	314.3	360.5	320.3
tions	52.4	52.2	67.7
	100.5	121.8	145.6
	52.7	62.2	75.7
	1,673.3	1,967.6	2,126.0
	115.7	140.5	144.6
	1,042.6	1,116.1	1,230.9
	677.5	764.3	804.6
	121.7	138.7	142.2
	2,111.2	2,163.2	2,258.1
	305.7	330.5	403.0
	102.6	128.6	187.5
	534.6	577.9	590.3
	412.5	469.5	521.3
	29.2	30.3	30.4
	794.4	913.4	1,024.0
olleges	260.0	286.5	301.3
	72.4	79.3	82.3
tions	2.1	5.5	11.9

Item	Actual 1971	Estimates 1972	Estimates 1973
Basic research – Continued			
Other domestic performers	19.2	20.6	22.7
Foreign	7.9	12.1	20.1
Fields of science			
Life sciences	595.7	738.4	814.2
Psychology	48.8	57.5	62.0
Physical sciences	743.4	769.6	871.6
Environmental sciences	392.7	455.6	467.4
Mathematics	52.3	60.4	59.7
Engineering	219.7	225.5	208.8
Social sciences	69.6	80.6	106.3
Other sciences	10.2	7.6	14.3
Applied research			
Performers			
Federal intramural[a]	1,498.5	1,594.1	1,682.7
Industrial firms	1,214.4	1,235.7	1,392.6
FFRDC's administered by industrial firms	46.4	45.9	50.1
Universities and colleges	701.3	844.0	929.1
FFRDC's administered by universities and colleges	138.9	155.4	165.8
Nonprofit institutions	241.9	281.2	238.0
FFRDC's administered by nonprofit institutions	50.2	46.7	55.8
Other domestic performers	81.3	101.2	122.9
Foreign	44.8	50.1	55.6
Fields of science			
Life sciences	1,077.6	1,229.2	1,311.8
Psychology	66.9	83.0	82.6
Physical sciences	299.2	346.5	359.3
Environmental sciences	284.8	308.7	337.2
Mathematics	69.5	78.3	82.5
Engineering	1,891.5	1,937.7	2,049.3
Social sciences	236.1	249.9	296.7
Other sciences	92.3	121.0	173.2
Development			
Performers			
Federal intramural[a]	2,132.4	2,337.1	2,324.7
Industrial firms	6,003.6	6,415.4	6,769.0
FFRDC's administered by industrial firms	404.5	438.9	472.8
Universities and colleges	148.8	157.9	173.0
FFRDC's administered by universities and colleges	330.0	340.7	350.9
Nonprofit institutions	171.3	149.8	163.9
FFRDC's administered by nonprofit institutions	157.8	145.2	139.7
Other domestic performers	40.5	65.8	81.9
Foreign	10.4	20.7	17.9
R&D Plant			
Performers supported			
Federal intramural	200.0	272.6	390.6
Industrial firms	56.8	92.5	102.0
FFRDC's administered by industrial firms	110.6	84.6	86.8
Universities and colleges	49.2	54.0	69.2
FFRDC's administered by universities and colleges	178.7	132.8	144.4
Nonprofit institutions	2.5	19.7	31.1
FFRDC's administered by nonprofit institutions	3.3	3.9	6.5
Other domestic performers	1.2	1.7	2.5
Foreign	8.9	2.5	2.8

ed with the administration of intramural and extramural
actual intramural performance.

TABLE C-2. FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	OBLIGATIONS			EXPENDITURES		
		ESTIMATES			ESTIMATES	
	ACTUAL, 1971	1972	1973	ACTUAL, 1971	1972	1973
TOTAL, ALL AGENCIES	16,160.8	17,485.3	18,626.8	15,992.4	16,733.9	17,326.9
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	310.0	359.6	362.7	318.9	360.7	360.7
AGRICULTURAL RESEARCH SERVICE	177.5	204.5	204.5	182.8	202.7	204.7
COOPERATIVE STATE RESEARCH SERVICE	67.8	82.3	87.3	69.1	77.6	82.6
ECONOMIC RESEARCH SERVICE	15.5	15.6	16.8	14.8	16.2	16.3
FARMER COOPERATIVE SERVICE	1.0	1.0	1.0	.9	1.0	1.0
FOREST SERVICE	47.1	55.2	52.0	50.2	62.2	55.1
NATIONAL AGRICULTURAL LIBRARY	.4	.2	.3	.4	.3	.2
STATISTICAL REPORTING SERVICE	.7	.7	.8	.7	.7	.7
DEPARTMENT OF COMMERCE, TOTAL	152.9	181.0	245.0	122.9	157.4	203.1
ECONOMIC DEVELOPMENT ADMINISTRATION	4.6	4.2	4.3	5.0	5.1	4.4
MARITIME ADMINISTRATION	24.3	24.5	31.0	9.2	20.3	24.3
NATIONAL BUREAU OF STANDARDS	33.8	38.9	61.8	33.5	39.1	52.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	83.4	104.3	137.6	68.4	84.5	112.2
OFFICE OF MINORITY BUSINESS ENTERPRISE	-	1.0	2.1	-	.3	1.3
OFFICE OF TELECOMMUNICATIONS	2.1	3.8	5.0	2.0	3.8	4.9
PATENT OFFICE	.6	.6	.6	.6	.6	.6
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	4.1	3.7	2.7	4.2	3.7	2.7
DEPARTMENT OF DEFENSE, TOTAL	7,662.7	8,550.1	8,973.3	7,706.0	8,286.[illegible]	8,441.5
DEPARTMENT OF THE ARMY	1,726.0	2,149.1	2,185.3	1,670.6	2,048.1	2,068.2
MILITARY FUNCTIONS	1,717.1	2,136.8	2,173.3	1,661.2	2,032.3	2,055.7
RDT&E APPROPRIATIONS	1,617.5	2,018.6	2,051.1	1,568.9	1,921.9	1,938.5
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	65.3	81.2	82.1	65.3	81.2	82.1
MILITARY CONSTRUCTION	34.4	37.0	40.1	27.0	29.2	35.1
CIVIL FUNCTIONS	8.8	12.3	11.9	9.4	15.8	12.5
DEPARTMENT OF THE NAVY	2,311.7	2,598.4	2,822.6	2,477.9	2,547.9	2,562.5
RDT&E APPROPRIATIONS	2,240.2	2,503.6	2,706.9	2,404.6	2,460.4	2,467.0
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	64.3	70.1	68.3	64.0	69.6	67.5
MILITARY CONSTRUCTION	6.3	18.4	43.1	8.4	16.1	23.
SPECIAL FOREIGN CURRENCY PROGRAM	.9	6.2	4.2	.9	1.9	4.
DEPARTMENT OF THE AIR FORCE	3,163.2	3,246.1	3,399.1	3,025.6	3,197.8	3,271.6
RDT&E APPROPRIATIONS	2,947.0	3,027.6	3,177.4	2,809.3	2,986.0	3,049.0
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	201.0	196.8	195.4	201.0	196.8	195.4
MILITARY CONSTRUCTION	15.1	21.6	26.3	15.1	14.9	27.2
SPECIAL FOREIGN CURRENCY PROGRAM	-	-	-	.1	.1	-
DEFENSE AGENCIES	458.8	502.8	512.9	527.5	473.8	493.1
RDT&E APPROPRIATIONS	454.2	497.9	507.2	520.2	468.2	487.5
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	4.6	4.7	5.3	4.6	4.7	5.3
MILITARY CONSTRUCTION	-	.2	.4	2.7	.9	.3
DEPARTMENTWIDE FUNDS	3.0	53.7	53.5	4.5	18.5	46.2
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,493.4	1,809.9	2,026.1	1,326.8	1,520.0	1,760.9
FOOD AND DRUG ADMINISTRATION	25.6	41.7	59.5	23.5	36.9	53.5

STATISTICAL REPORTING SERVICE	.7	.7	.8	.7	.7	.7
DEPARTMENT OF COMMERCE, TOTAL	152.9	181.0	245.0	122.9	157.4	203.1
ECONOMIC DEVELOPMENT ADMINISTRATION	4.6	4.2	4.3	5.0	5.1	4.4
MARITIME ADMINISTRATION	24.3	24.5	31.0	9.2	20.3	24.3
NATIONAL BUREAU OF STANDARDS	33.8	38.9	61.8	33.5	39.1	52.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	83.4	104.3	137.6	68.4	84.5	112.2
OFFICE OF MINORITY BUSINESS ENTERPRISE	-	1.0	2.1	-	.3	1.3
OFFICE OF TELECOMMUNICATIONS	2.1	3.8	5.0	2.0	3.8	4.9
PATENT OFFICE	.6	.6	.6	.6	.6	.6
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	4.1	3.7	2.7	4.2	3.7	2.7
DEPARTMENT OF DEFENSE, TOTAL	7,662.7	8,550.1	8,973.3	7,706.0	8,286.2	8,441.5
DEPARTMENT OF THE ARMY	1,726.0	2,149.1	2,185.3	1,670.6	2,048.1	2,068.2
MILITARY FUNCTIONS	1,717.1	2,136.8	2,173.3	1,661.2	2,032.3	2,055.7
RDT&E APPROPRIATIONS	1,617.5	2,018.6	2,051.1	1,568.9	1,921.9	1,938.5
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	65.3	81.2	82.1	65.3	81.2	82.1
MILITARY CONSTRUCTION	34.4	37.0	40.1	27.0	29.2	35.1
CIVIL FUNCTIONS	8.8	12.3	11.9	9.4	15.8	12.5
DEPARTMENT OF THE NAVY	2,311.7	2,598.4	2,822.6	2,477.9	2,547.9	2,562.5
RDT&E APPROPRIATIONS	2,240.2	2,503.6	2,706.9	2,404.6	2,460.4	2,467.0
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	64.3	70.1	68.3	64.0	69.6	67.5
MILITARY CONSTRUCTION	6.3	18.4	43.1	8.4	16.1	23.7
SPECIAL FOREIGN CURRENCY PROGRAM	.9	6.2	4.2	.9	1.9	4.2
DEPARTMENT OF THE AIR FORCE	3,163.2	3,246.1	3,399.1	3,025.6	3,197.8	3,271.6
RDT&E APPROPRIATIONS	2,947.0	3,027.6	3,177.4	2,809.3	2,986.0	3,049.0
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	201.0	196.8	195.4	201.0	196.8	195.4
MILITARY CONSTRUCTION	15.1	21.6	26.3	15.1	14.9	27.2
SPECIAL FOREIGN CURRENCY PROGRAM	-	-	-	.1	.1	-
DEFENSE AGENCIES	458.8	502.8	512.9	527.5	473.8	493.1
RDT&E APPROPRIATIONS	454.2	497.9	507.2	520.2	468.2	487.5
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	4.6	4.7	5.3	4.6	4.7	5.3
MILITARY CONSTRUCTION	-	.2	.4	2.7	.9	.3
DEPARTMENTWIDE FUNDS	3.0	53.7	53.5	4.5	18.5	46.2
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,493.4	1,809.9	2,026.1	1,326.8	1,520.0	1,760.9
FOOD AND DRUG ADMINISTRATION	25.6	41.7	59.5	23.5	34.9	53.5
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	223.5	252.5	257.8	195.5	223.0	245.4
NATIONAL INSTITUTE OF EDUCATION	-	-	125.0	-	-	50.0
NATIONAL INSTITUTES OF HEALTH	1,055.3	1,303.8	1,434.5	946.0	1,075.4	1,249.2
OFFICE OF CHILD DEVELOPMENT	11.2	17.6	19.4	3.9	6.2	7.9
OFFICE OF EDUCATION	132.8	140.1	72.4	114.8	129.6	102.4
SOCIAL AND REHABILITATION SERVICE	34.1	41.8	45.0	32.7	38.6	40.0
SOCIAL SECURITY ADMINISTRATION	10.9	12.4	12.6	10.5	12.2	12.6
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	47.7	53.3	62.9	40.5	56.1	53.6
DEPARTMENT OF THE INTERIOR, TOTAL	202.2	239.8	277.7	185.1	225.8	267.7
BONNEVILLE POWER ADMINISTRATION	2.9	4.6	3.2	2.8	5.5	3.4
BUREAU OF LAND MANAGEMENT	.8	.8	.8	.8	.8	.8
BUREAU OF MINES	60.3	70.3	80.0	50.0	69.8	80.0
BUREAU OF OUTDOOR RECREATION	.2	.1	.1	.2	.1	.1
BUREAU OF RECLAMATION	9.2	9.9	9.1	9.0	10.5	9.1
BUREAU OF SPORT FISHERIES AND WILDLIFE	23.3	24.4	26.4	20.1	21.5	23.6
GEOLOGICAL SURVEY	44.1	54.8	68.7	44.1	51.1	66.3
NATIONAL PARK SERVICE	1.1	1.2	1.5	1.1	1.2	1.5
OFFICE OF COAL RESEARCH	18.8	31.1	45.3	17.6	24.0	40.2
OFFICE OF SALINE WATER	28.9	27.3	27.2	28.0	28.4	27.9
OFFICE OF THE SECRETARY	.2	2.0	2.0	*	1.1	2.3
OFFICE OF WATER RESOURCES RESEARCH	12.4	13.3	13.3	11.3	11.7	12.6

CONTINUED ON NEXT PAGE

TABLE C-2. FEDERAL FUNDS FOR RESEARCH, DEVELOPMENT, AND R&D PLANT, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

CONTINUED (MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	OBLIGATIONS			EXPENDITURES		
		ESTIMATES			ESTIMATES	
	ACTUAL, 1971	1972	1973	ACTUAL, 1971	1972	1973
DEPARTMENT OF JUSTICE, TOTAL	10.3	23.3	27.8	9.9	23.8	27.3
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1.5	1.5	1.5	1.3	1.4	1.4
BUREAU OF PRISONS	.4	.4	.4	.3	.4	.4
FEDERAL BUREAU OF INVESTIGATION	1.0	.5	1.0	.4	1.0	.5
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	7.5	21.0	25.0	7.8	21.0	25.0
DEPARTMENT OF LABOR, TOTAL	22.8	26.8	28.7	22.1	26.4	28.3
BUREAU OF LABOR STATISTICS	3.8	4.5	4.8	3.6	4.5	4.8
EMPLOYMENT STANDARDS ADMINISTRATION	1.5	1.9	1.9	1.5	1.8	1.8
LABOR-MANAGEMENT SERVICES ADMINISTRATION	.5	.9	1.2	.5	.9	1.2
MANPOWER ADMINISTRATION	16.5	18.9	18.9	16.1	18.6	18.6
OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION	.3	.4	.7	.3	.4	.7
OFFICE OF THE SECRETARY	.2	.3	1.3	.1	.3	1.3
DEPARTMENT OF STATE, TOTAL	39.0	28.9	39.4	29.5	29.5	37.5
DEPARTMENTAL FUNDS	.4	.6	.8	.4	.6	.8
AGENCY FOR INTERNATIONAL DEVELOPMENT	38.6	28.4	38.6	29.1	28.9	36.8
DEPARTMENT OF TRANSPORTATION, TOTAL	493.3	396.1	441.8	477.8	397.2	334.3
FEDERAL AVIATION ADMINISTRATION	347.4	172.3	128.1	340.1	219.6	104.3
FEDERAL HIGHWAY ADMINISTRATION	27.1	27.8	42.6	28.5	29.0	39.6
FEDERAL RAILROAD ADMINISTRATION	25.3	38.3	71.4	25.6	36.9	51.7
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	26.7	53.1	67.3	22.9	35.3	38.5
OFFICE OF THE SECRETARY	15.3	26.9	42.0	16.9	22.8	31.0
UNITED STATES COAST GUARD	23.2	44.1	40.1	24.8	40.3	35.9
URBAN MASS TRANSPORTATION ADMINISTRATION	28.3	33.6	50.4	19.1	13.3	33.4
DEPARTMENT OF THE TREASURY, TOTAL	.8	1.0	1.0	.8	1.0	1.0
BUREAU OF ENGRAVING AND PRINTING	.8	1.0	1.0	.8	1.0	1.0
OTHER AGENCIES						
ACTION	.1	*	.1	.1	.1	.1
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	.5	.6	.6	.5	.6	.6
APPALACHIAN REGIONAL COMMISSION	3.0	3.0	3.0	1.6	3.8	2.1
ATOMIC ENERGY COMMISSION	1,615.2	1,590.9	1,660.4	1,604.9	1,580.0	1,619.5
CIVIL AERONAUTICS BOARD	.3	.3	.3	.3	.3	.3
CIVIL SERVICE COMMISSION	.6	1.1	1.5	.6	1.1	1.5
ENVIRONMENTAL PROTECTION AGENCY	137.8	178.6	221.7	101.0	157.7	180.7
FEDERAL COMMUNICATIONS COMMISSION	.6	.8	1.5	.6	.7	.9
FEDERAL HOME LOAN BANK BOARD	.4	.5	.6	.4	.5	.6
FEDERAL TRADE COMMISSION	.4	.6	.6	.4	.6	.6
GENERAL SERVICES ADMINISTRATION	.2	.8	.6	.2	.8	.6
LIBRARY OF CONGRESS	2.5	2.4	2.4	2.6	2.2	2.3
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	3,298.2	3,260.7	3,352.3	3,381.9	3,181.0	3,192.4
NATIONAL SCIENCE FOUNDATION	364.8	480.7	563.6	373.9	440.3	489.9
OFFICE OF ECONOMIC OPPORTUNITY	153.1	118.9	112.5	148.7	124.0	113.5
OFFICE OF EMERGENCY PREPAREDNESS	.6	.5	.5	.2	.7	.5
OFFICE OF SCIENCE AND TECHNOLOGY	2.0	2.0	2.1	2.0	2.1	2.1
OFFICE OF TELECOMMUNICATIONS POLICY	.2	.8	1.3	.2	.6	1.1
POSTAL SERVICE	40.4	68.2	74.3	34.4	38.8	64.0
SMITHSONIAN INSTITUTION	15.1	18.8	24.0	17.2	20.6	26.1
TENNESSEE VALLEY AUTHORITY	9.9	13.7	27.7	9.9	13.7	27.7
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	1.7	1.6	2.2	2.6	2.0	2.1
UNITED STATES INFORMATION AGENCY	.1	.2	.1	.2	.2	.1
VETERANS ADMINISTRATION	77.9	70.1	86.6	67.9	77.6	81.8

TABLE C-3. FEDERAL FUNDS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	OBLIGATIONS			EXPENDITURES		
		ESTIMATES			ESTIMATES	
	ACTUAL,1971	1972	1973	ACTUAL,1971	1972	1973
TOTAL, ALL AGENCIES	15,549.5	16,820.9	17,790.8	15,379.7	16,093.6	16,632.4
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	304.9	348.5	361.4	311.3	346.4	355.7
AGRICULTURAL RESEARCH SERVICE	173.5	198.5	203.2	177.7	193.8	201.3
COOPERATIVE STATE RESEARCH SERVICE	67.8	82.3	87.3	67.8	77.2	82.2
ECONOMIC RESEARCH SERVICE	15.5	15.6	16.8	14.8	16.2	16.3
FARMER COOPERATIVE SERVICE	1.0	1.0	1.0	.9	1.0	1.0
FOREST SERVICE	46.0	50.1	52.0	49.1	57.3	53.9
NATIONAL AGRICULTURAL LIBRARY	.4	.2	.3	.4	.3	.2
STATISTICAL REPORTING SERVICE	.7	.7	.8	.7	.7	.7
DEPARTMENT OF COMMERCE, TOTAL	143.7	173.3	228.3	118.2	150.1	193.2
ECONOMIC DEVELOPMENT ADMINISTRATION	4.6	4.2	4.3	5.0	5.1	4.4
MARITIME ADMINISTRATION	20.7	24.5	30.7	9.2	20.3	23.5
NATIONAL BUREAU OF STANDARDS	32.6	35.3	58.5	31.8	35.8	49.5
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	79.0	100.2	124.4	65.4	80.6	106.3
OFFICE OF MINORITY BUSINESS ENTERPRISE	-	1.0	2.1	-	.3	1.3
OFFICE OF TELECOMMUNICATIONS	2.1	3.8	5.0	2.0	3.8	4.9
PATENT OFFICE	.6	.6	.6	.6	.6	.6
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	4.1	3.7	2.7	4.2	3.7	2.7
DEPARTMENT OF DEFENSE, TOTAL	7,509.0	8,374.1	8,773.8	7,561.5	8,128.5	8,260.9
DEPARTMENT OF THE ARMY	1,682.4	2,101.8	2,135.5	1,637.9	2,010.0	2,023.2
MILITARY FUNCTIONS	1,673.8	2,089.8	2,123.8	1,628.5	1,994.4	2,011.5
RDT&E APPROPRIATIONS	1,608.5	2,008.6	2,041.7	1,563.3	1,913.2	1,929.4
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	65.3	81.2	82.1	65.3	81.2	82.1
CIVIL FUNCTIONS	8.6	12.0	11.7	9.3	15.6	11.7
DEPARTMENT OF THE NAVY	2,283.7	2,550.0	2,752.9	2,449.4	2,503.9	2,512.8
RDT&E APPROPRIATIONS	2,218.5	2,473.7	2,680.4	2,384.6	2,432.4	2,441.0
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	64.3	70.1	68.3	64.0	69.6	67.5
SPECIAL FOREIGN CURRENCY PROGRAM	.9	6.2	4.2	.9	1.9	4.2
DEPARTMENT OF THE AIR FORCE	3,113.5	3,195.5	3,343.6	2,975.9	3,154.0	3,215.2
RDT&E APPROPRIATIONS	2,912.5	2,998.7	3,148.2	2,774.7	2,957.1	3,019.8
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	201.0	196.8	195.4	201.0	196.8	195.4
SPECIAL FOREIGN CURRENCY PROGRAM	-	-	-	.1	.1	-
DEFENSE AGENCIES	426.5	473.1	488.3	493.8	442.1	463.5
RDT&E APPROPRIATIONS	421.9	468.4	483.0	489.2	437.4	458.2
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	4.6	4.7	5.3	4.6	4.7	5.3
DEPARTMENTWIDE FUNDS	3.0	53.7	53.5	4.5	18.5	46.2
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,476.1	1,763.5	1,957.2	1,282.5	1,462.7	1,700.5
FOOD AND DRUG ADMINISTRATION	25.6	37.8	56.5	23.5	34.2	48.1
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	222.9	247.4	257.8	195.0	221.9	241.3
NATIONAL INSTITUTE OF EDUCATION	-	-	125.0	-	-	50.0
NATIONAL INSTITUTES OF HEALTH	1,039.0	1,266.4	1,368.6	905.8	1,032.8	1,207.1
OFFICE OF CHILD DEVELOPMENT	11.2	17.6	19.4	3.9	6.2	7.9
OFFICE OF EDUCATION	132.4	140.1	72.4	111.2	116.7	93.6
SOCIAL AND REHABILITATION SERVICE	34.1	41.8	45.0	32.7	38.6	40.0
SOCIAL SECURITY ADMINISTRATION	10.9	12.4	12.6	10.5	12.2	12.6

DEPARTMENT OF COMMERCE, TOTAL	143.7	173.3	228.3	118.2	150.1	193.2
ECONOMIC DEVELOPMENT ADMINISTRATION	4.6	4.2	4.3	5.0	5.1	4.4
MARITIME ADMINISTRATION	20.7	24.5	30.7	9.2	20.3	23.5
NATIONAL BUREAU OF STANDARDS	32.6	35.3	58.5	31.8	35.8	49.5
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	79.0	100.2	124.4	65.4	80.6	106.3
OFFICE OF MINORITY BUSINESS ENTERPRISE	-	1.0	2.1	-	.3	1.3
OFFICE OF TELECOMMUNICATIONS	2.1	3.8	5.0	2.0	3.8	4.9
PATENT OFFICE	.6	.6	.6	.6	.6	.6
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	4.1	3.7	2.7	4.2	3.7	2.7
DEPARTMENT OF DEFENSE, TOTAL	7,509.0	8,374.1	8,773.8	7,561.5	8,128.5	8,260.9
DEPARTMENT OF THE ARMY	1,682.4	2,101.8	2,135.5	1,637.9	2,010.0	2,023.2
MILITARY FUNCTIONS	1,673.8	2,089.8	2,123.8	1,628.5	1,994.4	2,011.5
RDT&E APPROPRIATIONS	1,608.5	2,008.6	2,041.7	1,563.3	1,913.2	1,929.4
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	65.3	81.2	82.1	65.3	81.2	82.1
CIVIL FUNCTIONS	8.6	12.0	11.7	9.3	15.6	11.7
DEPARTMENT OF THE NAVY	2,283.7	2,550.0	2,752.9	2,449.4	2,503.9	2,512.8
RDT&E APPROPRIATIONS	2,218.5	2,473.7	2,680.4	2,384.6	2,432.4	2,441.0
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	64.3	70.1	68.3	64.0	69.6	67.5
SPECIAL FOREIGN CURRENCY PROGRAM	.9	6.2	4.2	.9	1.9	4.2
DEPARTMENT OF THE AIR FORCE	3,113.5	3,195.5	3,343.6	2,975.9	3,154.0	3,215.2
RDT&E APPROPRIATIONS	2,912.5	2,998.7	3,148.2	2,774.7	2,957.1	3,019.8
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	201.0	196.8	195.4	201.0	196.8	195.4
SPECIAL FOREIGN CURRENCY PROGRAM	-	-	-	.1	.1	-
DEFENSE AGENCIES	426.5	473.1	488.3	493.8	442.1	463.5
RDT&E APPROPRIATIONS	421.9	468.4	483.0	489.2	437.4	458.2
PAY AND ALLOWANCES OF MILITARY PERSONNEL IN R&D	4.6	4.7	5.3	4.6	4.7	5.3
DEPARTMENTWIDE FUNDS	3.0	53.7	53.5	4.5	18.5	46.2
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,476.1	1,763.5	1,957.2	1,282.5	1,462.7	1,700.5
FOOD AND DRUG ADMINISTRATION	25.6	37.8	56.5	23.5	34.2	48.1
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	222.9	247.4	257.8	195.0	221.9	241.3
NATIONAL INSTITUTE OF EDUCATION	-	-	125.0	-	-	50.0
NATIONAL INSTITUTES OF HEALTH	1,039.0	1,266.4	1,368.6	905.8	1,032.8	1,207.1
OFFICE OF CHILD DEVELOPMENT	11.2	17.6	19.4	3.9	6.2	7.9
OFFICE OF EDUCATION	132.4	140.1	72.4	111.2	116.7	93.6
SOCIAL AND REHABILITATION SERVICE	34.1	41.8	45.0	32.7	38.6	40.0
SOCIAL SECURITY ADMINISTRATION	10.9	12.4	12.6	10.5	12.2	12.6
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	47.7	53.3	62.9	40.5	56.1	53.6
DEPARTMENT OF THE INTERIOR, TOTAL	193.7	224.0	256.0	178.1	213.9	241.0
BONNEVILLE POWER ADMINISTRATION	1.9	3.4	3.1	1.9	4.2	3.1
BUREAU OF LAND MANAGEMENT	.8	.8	.8	.8	.8	.8
BUREAU OF MINES	60.3	70.3	80.0	50.0	69.8	80.0
BUREAU OF OUTDOOR RECREATION	.2	.1	.1	.2	.1	.1
BUREAU OF RECLAMATION	9.2	9.9	9.1	9.0	10.5	9.1
BUREAU OF SPORT FISHERIES AND WILDLIFE	23.0	23.9	26.1	19.9	21.1	23.2
GEOLOGICAL SURVEY	44.1	54.0	68.7	44.1	50.7	65.9
NATIONAL PARK SERVICE	1.1	1.2	1.5	1.1	1.2	1.5
OFFICE OF COAL RESEARCH	16.4	20.8	25.3	13.7	17.9	18.4
OFFICE OF SALINE WATER	24.0	24.3	26.0	26.2	24.8	24.1
OFFICE OF THE SECRETARY	.2	2.0	2.0	*	1.1	2.3
OFFICE OF WATER RESOURCES RESEARCH	12.4	13.3	13.3	11.3	11.7	12.6
DEPARTMENT OF JUSTICE, TOTAL	10.3	23.3	27.8	9.9	23.8	27.3
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1.5	1.5	1.5	1.3	1.4	1.4
BUREAU OF PRISONS	.4	.4	.4	.3	.4	.4
FEDERAL BUREAU OF INVESTIGATION	1.0	.5	1.0	.4	1.0	.5
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	7.5	21.0	25.0	7.8	21.0	25.0

CONTINUED ON NEXT PAGE

TABLE C-3. FEDERAL FUNDS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

CONTINUED (MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	OBLIGATIONS			EXPENDITURES		
	ACTUAL, 1971	ESTIMATES		ACTUAL, 1971	ESTIMATES	
		1972	1973		1972	1973
DEPARTMENT OF LABOR, TOTAL	22.8	26.8	28.7	22.1	26.4	28.3
BUREAU OF LABOR STATISTICS	3.8	4.5	4.8	3.6	4.5	4.8
EMPLOYMENT STANDARDS ADMINISTRATION	1.5	1.9	1.9	1.5	1.8	1.8
LABOR-MANAGEMENT SERVICES ADMINISTRATION	.5	.9	1.2	.5	.9	1.2
MANPOWER ADMINISTRATION	16.5	18.9	18.9	16.1	18.6	18.6
OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION	.3	.4	.7	.3	.4	.7
OFFICE OF THE SECRETARY	.2	.3	1.3	.1	.3	1.3
DEPARTMENT OF STATE, TOTAL	30.1	26.4	36.7	28.5	27.2	35.1
DEPARTMENTAL FUNDS	.4	.6	.8	.4	.6	.8
AGENCY FOR INTERNATIONAL DEVELOPMENT	29.7	25.9	35.9	28.2	26.6	34.3
DEPARTMENT OF TRANSPORTATION, TOTAL	482.5	364.5	381.0	468.2	369.6	295.6
FEDERAL AVIATION ADMINISTRATION	346.3	170.8	113.6	339.3	218.6	99.8
FEDERAL HIGHWAY ADMINISTRATION	26.8	27.4	42.2	28.3	28.6	39.2
FEDERAL RAILROAD ADMINISTRATION	21.6	25.0	43.9	21.0	23.9	31.2
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	26.7	53.1	67.3	22.9	35.3	38.5
OFFICE OF THE SECRETARY	15.3	26.9	42.0	16.9	22.8	31.0
UNITED STATES COAST GUARD	21.6	32.7	29.2	23.2	32.0	28.6
URBAN MASS TRANSPORTATION ADMINISTRATION	24.3	28.6	42.9	16.6	8.4	27.4
DEPARTMENT OF THE TREASURY, TOTAL	.8	1.0	1.0	.8	1.0	1.0
BUREAU OF ENGRAVING AND PRINTING	.8	1.0	1.0	.8	1.0	1.0
OTHER AGENCIES						
ACTION	.1	*	.1	.1	.1	.1
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	.5	.6	.6	.5	.6	.6
APPALACHIAN REGIONAL COMMISSION	3.0	3.0	3.0	1.6	3.8	2.1
ATOMIC ENERGY COMMISSION	1,302.9	1,307.8	1,374.6	1,302.9	1,307.8	1,374.6
CIVIL AERONAUTICS BOARD	.3	.3	.3	.3	.3	.3
CIVIL SERVICE COMMISSION	.6	1.1	1.5	.6	1.1	1.5
ENVIRONMENTAL PROTECTION AGENCY	136.7	175.8	185.6	100.6	156.7	174.2
FEDERAL COMMUNICATIONS COMMISSION	.6	.8	.8	.6	.7	.6
FEDERAL HOME LOAN BANK BOARD	.4	.5	.6	.4	.5	.6
FEDERAL TRADE COMMISSION	.4	.6	.6	.4	.6	.6
GENERAL SERVICES ADMINISTRATION	.2	.8	.6	.2	.8	.6
LIBRARY OF CONGRESS	2.5	2.4	2.4	2.6	2.2	2.3
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	3,257.9	3,208.0	3,275.0	3,337.8	3,137.9	3,132.4
NATIONAL SCIENCE FOUNDATION	336.9	451.1	525.6	334.7	409.2	455.3
OFFICE OF ECONOMIC OPPORTUNITY	153.1	118.9	112.5	148.7	124.0	113.5
OFFICE OF EMERGENCY PREPAREDNESS	.6	.5	.5	.2	.7	.5
OFFICE OF SCIENCE AND TECHNOLOGY	2.0	2.0	2.1	2.0	2.1	2.1
OFFICE OF TELECOMMUNICATIONS POLICY	.2	.8	1.3	.2	.6	1.1
POSTAL SERVICE	39.7	68.0	74.3	33.8	38.7	63.9
SMITHSONIAN INSTITUTION	15.1	18.8	24.0	17.2	20.6	26.1
TENNESSEE VALLEY AUTHORITY	9.3	10.9	12.3	9.3	10.9	12.3
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	1.7	1.6	2.2	2.6	2.0	2.1
UNITED STATES INFORMATION AGENCY	.1	.2	.1	.2	.2	.1
VETERANS ADMINISTRATION	62.9	68.0	75.5	60.8	65.9	73.0

TABLE C-4. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND CHARACTER OF WORK, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	RESEARCH		DEVELOPMENT
		BASIC	APPLIED	
TOTAL, ALL AGENCIES	15,549,506	2,132,348	4,017,859	9,399,299
DEPARTMENTS				
DEPARTMENT OF AGRICULTURE, TOTAL	304,902	118,414	173,738	12,750
AGRICULTURAL RESEARCH SERVICE	173,456	72,070	89,776	11,610
COOPERATIVE STATE RESEARCH SERVICE	67,762	25,750	42,012	-
ECONOMIC RESEARCH SERVICE	15,534	4,660	10,874	-
FARMER COOPERATIVE SERVICE	1,017	203	814	-
FOREST SERVICE	46,032	15,651	29,460	921
NATIONAL AGRICULTURAL LIBRARY	391	-	391	-
STATISTICAL REPORTING SERVICE	710	80	411	219
DEPARTMENT OF COMMERCE, TOTAL	143,711	41,777	71,897	30,037
ECONOMIC DEVELOPMENT ADMINISTRATION	4,630	-	1,726	2,904
MARITIME ADMINISTRATION	20,726	399	12,806	7,521
NATIONAL BUREAU OF STANDARDS	32,569	14,496	14,159	3,914
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	78,989	26,066	39,495	13,428
OFFICE OF TELECOMMUNICATIONS	2,107	470	1,637	-
PATENT OFFICE	577	-	412	165
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	4,113	346	1,662	2,105
DEPARTMENT OF DEFENSE, TOTAL	7,509,036	261,545	1,351,410	5,896,081
DEPARTMENT OF THE ARMY	1,682,350	46,509	292,617	1,343,224
DEPARTMENT OF THE NAVY	2,283,674	85,778	187,372	2,010,524
DEPARTMENT OF THE AIR FORCE	3,113,500	84,719	592,467	2,436,314
DEFENSE AGENCIES	426,485	44,539	275,927	106,019
DEPARTMENTWIDE FUNDS	3,027	-	3,027	-
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,476,071	397,316	905,014	173,741
FOOD AND DRUG ADMINISTRATION	25,643	-	25,643	-
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	222,902	63,568	115,589	43,745
NATIONAL INSTITUTES OF HEALTH	1,039,000	326,500	657,400	55,100
OFFICE OF CHILD DEVELOPMENT	11,152	-	7,852	3,300
OFFICE OF EDUCATION	132,376	6,815	55,958	69,603
SOCIAL AND REHABILITATION SERVICE	34,065	-	32,072	1,993
SOCIAL SECURITY ADMINISTRATION	10,933	433	10,500	-
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	47,712	-	10,496	37,216
DEPARTMENT OF THE INTERIOR, TOTAL	193,731	52,690	86,381	54,660
BONNEVILLE POWER ADMINISTRATION	1,928	-	341	1,587
BUREAU OF LAND MANAGEMENT	779	-	755	24
BUREAU OF MINES	60,300	6,525	32,214	21,561
BUREAU OF OUTDOOR RECREATION	185	-	185	-
BUREAU OF RECLAMATION	9,227	59	9,078	90
BUREAU OF SPORT FISHERIES AND WILDLIFE	23,046	9,110	11,884	2,052
GEOLOGICAL SURVEY	44,146	31,619	12,527	-
NATIONAL PARK SERVICE	1,141	704	437	-
OFFICE OF COAL RESEARCH	16,395	-	4,955	11,440
OFFICE OF SALINE WATER	24,016	2,041	4,069	17,906
OFFICE OF THE SECRETARY	153	-	153	-
OFFICE OF WATER RESOURCES RESEARCH	12,415	2,632	9,783	-
DEPARTMENT OF JUSTICE, TOTAL	10,321	-	6,525	3,796
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,495	-	1,495	-
BUREAU OF PRISONS	358	-	-	358
FEDERAL BUREAU OF INVESTIGATION	968	-	-	968
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	7,500	-	5,030	2,470

CONTINUED ON NEXT PAGE

TABLE C-4. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND CHARACTER OF WORK, FISCAL YEAR 1971

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	RESEARCH		DEVELOPMENT
		BASIC	APPLIED	
DEPARTMENT OF LABOR, TOTAL	22,812	2,502	11,120	9,190
BUREAU OF LABOR STATISTICS	3,756	1,403	1,450	903
EMPLOYMENT STANDARDS ADMINISTRATION	1,501	-	1,501	-
LABOR-MANAGEMENT SERVICES ADMINISTRATION	547	547	-	-
MANPOWER ADMINISTRATION	16,503	552	7,681	8,270
OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION	326	-	326	-
OFFICE OF THE SECRETARY	179	-	162	17
DEPARTMENT OF STATE, TOTAL	30,053	-	28,975	1,078
DEPARTMENTAL FUNDS	350	-	350	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	29,703	-	28,625	1,078
DEPARTMENT OF TRANSPORTATION, TOTAL	482,516	341	172,838	309,337
FEDERAL AVIATION ADMINISTRATION	346,267	-	93,492	252,775
FEDERAL HIGHWAY ADMINISTRATION	26,758	134	23,734	2,890
FEDERAL RAILROAD ADMINISTRATION	21,611	11	17,939	3,661
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	26,731	-	14,702	12,029
OFFICE OF THE SECRETARY	15,250	153	8,540	6,557
UNITED STATES COAST GUARD	21,587	43	4,706	16,838
URBAN MASS TRANSPORTATION ADMINISTRATION	24,312	-	9,725	14,587
DEPARTMENT OF THE TREASURY, TOTAL	801	-	383	418
BUREAU OF ENGRAVING AND PRINTING	801	-	383	418
OTHER AGENCIES				
ACTION	103	-	103	-
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	544	-	544	-
APPALACHIAN REGIONAL COMMISSION	2,980	-	2,980	-
ATOMIC ENERGY COMMISSION	1,302,926	276,897	152,094	873,935
CIVIL AERONAUTICS BOARD	277	-	277	-
CIVIL SERVICE COMMISSION	550	136	233	181
ENVIRONMENTAL PROTECTION AGENCY	136,718	6,100	47,718	82,900
FEDERAL COMMUNICATIONS COMMISSION	616	-	516	-
FEDERAL HOME LOAN BANK BOARD	395	-	395	-
FEDERAL TRADE COMMISSION	440	-	440	-
GENERAL SERVICES ADMINISTRATION	196	-	93	103
LIBRARY OF CONGRESS	2,454	-	982	1,472
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	3,257,927	680,264	816,686	1,760,977
NATIONAL SCIENCE FOUNDATION	336,942	272,566	45,720	18,656
OFFICE OF ECONOMIC OPPORTUNITY	153,148	3,235	59,877	90,036
OFFICE OF EMERGENCY PREPAREDNESS	577	-	577	-
OFFICE OF SCIENCE AND TECHNOLOGY	2,030	406	609	1,015
OFFICE OF TELECOMMUNICATIONS POLICY	177	-	177	-
POSTAL SERVICE	39,745	-	1,012	38,733
SMITHSONIAN INSTITUTION	15,082	15,082	-	-
TENNESSEE VALLEY AUTHORITY	9,284	-	7,455	1,829
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	1,708	-	1,354	354
UNITED STATES INFORMATION AGENCY	120	-	108	12
VETERANS ADMINISTRATION	62,901	3,077	59,032	792

TABLE C-5. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND CHARACTER OF WORK, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	RESEARCH		DEVELOPMENT
		BASIC	APPLIED	
TOTAL, ALL AGENCIES	16,820,926	2,395,170	4,354,278	10,071,478
DEPARTMENTS				
DEPARTMENT OF AGRICULTURE, TOTAL	348,515	137,862	196,705	13,948
AGRICULTURAL RESEARCH SERVICE	198,471	84,577	101,173	12,721
COOPERATIVE STATE RESEARCH SERVICE	82,272	31,263	51,009	-
ECONOMIC RESEARCH SERVICE	15,638	4,691	10,947	-
FARMER COOPERATIVE SERVICE	1,034	207	827	-
FOREST SERVICE	50,125	17,043	32,080	1,002
NATIONAL AGRICULTURAL LIBRARY	249	-	249	-
STATISTICAL REPORTING SERVICE	726	81	420	225
DEPARTMENT OF COMMERCE, TOTAL	173,315	52,036	91,908	29,371
ECONOMIC DEVELOPMENT ADMINISTRATION	4,206	-	1,284	2,922
MARITIME ADMINISTRATION	24,535	2,796	20,099	1,640
NATIONAL BUREAU OF STANDARDS	35,284	15,117	15,764	4,403
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	100,207	33,068	50,104	17,035
OFFICE OF MINORITY BUSINESS ENTERPRISE	1,022	-	-	1,022
OFFICE OF TELECOMMUNICATIONS	3,774	664	3,110	-
PATENT OFFICE	584	-	290	294
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	3,703	391	1,257	2,055
DEPARTMENT OF DEFENSE, TOTAL	8,374,063	264,873	1,428,555	6,680,635
DEPARTMENT OF THE ARMY	2,101,782	48,779	267,246	1,785,757
DEPARTMENT OF THE NAVY	2,549,997	91,398	220,366	2,238,233
DEPARTMENT OF THE AIR FORCE	3,195,505	86,296	608,726	2,500,483
DEFENSE AGENCIES	473,079	38,400	328,517	106,162
DEPARTMENTWIDE FUNDS	53,700	-	3,700	50,000
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,763,459	466,897	1,047,098	249,464
FOOD AND DRUG ADMINISTRATION	37,762	-	37,762	-
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	247,427	75,939	122,720	48,768
NATIONAL INSTITUTES OF HEALTH	1,266,400	386,100	776,100	104,200
OFFICE OF CHILD DEVELOPMENT	17,600	-	9,600	8,000
OFFICE OF EDUCATION	140,091	4,350	50,083	85,658
SOCIAL AND REHABILITATION SERVICE	41,792	-	38,954	2,838
SOCIAL SECURITY ADMINISTRATION	12,387	508	11,879	-
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	53,284	-	21,846	31,438
DEPARTMENT OF THE INTERIOR, TOTAL	224,018	59,221	95,290	69,507
BONNEVILLE POWER ADMINISTRATION	3,380	-	580	2,800
BUREAU OF LAND MANAGEMENT	838	-	813	25
BUREAU OF MINES	70,289	7,858	32,719	29,712
BUREAU OF OUTDOOR RECREATION	85	-	85	-
BUREAU OF RECLAMATION	9,922	104	9,607	211
BUREAU OF SPORT FISHERIES AND WILDLIFE	23,910	9,317	12,435	2,158
GEOLOGICAL SURVEY	54,012	36,567	16,195	1,250
NATIONAL PARK SERVICE	1,208	801	407	-
OFFICE OF COAL RESEARCH	20,770	-	7,500	13,270
OFFICE OF SALINE WATER	24,299	1,655	4,130	18,514
OFFICE OF THE SECRETARY	1,972	-	405	1,567
OFFICE OF WATER RESOURCES RESEARCH	13,333	2,919	10,414	-
DEPARTMENT OF JUSTICE, TOTAL	23,318	-	14,484	8,834
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	-	1,484	-
BUREAU OF PRISONS	384	-	-	384
FEDERAL BUREAU OF INVESTIGATION	450	-	-	450
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	21,000	-	13,000	8,000

CONTINUED ON NEXT PAGE

TABLE C-5. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND CHARACTER OF WORK, FISCAL YEAR 1972 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	RESEARCH		DEVELOPMENT
		BASIC	APPLIED	
DEPARTMENT OF LABOR, TOTAL	26,782	2,940	11,602	12,240
BUREAU OF LABOR STATISTICS	4,503	1,484	1,576	1,443
EMPLOYMENT STANDARDS ADMINISTRATION	1,867	-	1,867	-
LABOR-MANAGEMENT SERVICES ADMINISTRATION	856	856	-	-
MANPOWER ADMINISTRATION	18,918	600	7,803	10,515
OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION	380	-	150	230
OFFICE OF THE SECRETARY	258	-	206	52
DEPARTMENT OF STATE, TOTAL	26,430	-	25,363	1,067
DEPARTMENTAL FUNDS	550	-	550	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	25,880	-	24,813	1,067
DEPARTMENT OF TRANSPORTATION, TOTAL	364,507	484	154,011	210,012
FEDERAL AVIATION ADMINISTRATION	170,787	-	46,112	124,675
FEDERAL HIGHWAY ADMINISTRATION	27,449	138	24,347	2,964
FEDERAL RAILROAD ADMINISTRATION	24,970	12	20,728	4,230
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	53,075	-	29,191	23,884
OFFICE OF THE SECRETARY	26,859	269	15,041	11,549
UNITED STATES COAST GUARD	32,723	65	7,134	25,524
URBAN MASS TRANSPORTATION ADMINISTRATION	28,644	-	11,458	17,186
DEPARTMENT OF THE TREASURY, TOTAL	1,000	-	542	458
BUREAU OF ENGRAVING AND PRINTING	1,000	-	542	458
OTHER AGENCIES				
ACTION	10	-	10	-
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	581	-	581	-
APPALACHIAN REGIONAL COMMISSION	2,974	-	2,974	-
ATOMIC ENERGY COMMISSION	1,307,803	270,284	156,907	880,612
CIVIL AERONAUTICS BOARD	294	-	294	-
CIVIL SERVICE COMMISSION	1,064	117	301	646
ENVIRONMENTAL PROTECTION AGENCY	175,761	8,300	58,546	108,915
FEDERAL COMMUNICATIONS COMMISSION	774	-	774	-
FEDERAL HOME LOAN BANK BOARD	503	-	503	-
FEDERAL TRADE COMMISSION	580	-	580	-
GENERAL SERVICES ADMINISTRATION	798	-	439	359
LIBRARY OF CONGRESS	2,377	-	1,188	1,189
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	3,208,023	750,341	826,884	1,630,798
NATIONAL SCIENCE FOUNDATION	451,077	353,445	70,665	26,967
OFFICE OF ECONOMIC OPPORTUNITY	118,900	6,037	61,264	51,599
OFFICE OF EMERGENCY PREPAREDNESS	515	-	515	-
OFFICE OF SCIENCE AND TECHNOLOGY	2,048	410	614	1,024
OFFICE OF TELECOMMUNICATIONS POLICY	810	-	810	-
POSTAL SERVICE	68,010	-	8,521	59,489
SMITHSONIAN INSTITUTION	18,751	18,751	-	-
TENNESSEE VALLEY AUTHORITY	10,892	-	9,049	1,843
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	1,567	-	1,362	205
UNITED STATES INFORMATION AGENCY	166	-	162	4
VETERANS ADMINISTRATION	67,957	3,172	63,931	854

TABLE C-6. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND CHARACTER OF WORK, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	RESEARCH		DEVELOPMENT
		BASIC	APPLIED	
TOTAL, ALL AGENCIES	17,790,801	2,604,300	4,692,591	10,493,910
DEPARTMENTS				
DEPARTMENT OF AGRICULTURE, TOTAL	361,388	145,042	200,984	15,362
AGRICULTURAL RESEARCH SERVICE	203,208	88,849	100,282	14,077
COOPERATIVE STATE RESEARCH SERVICE	87,273	33,164	54,109	-
ECONOMIC RESEARCH SERVICE	16,836	5,051	11,785	-
FARMER COOPERATIVE SERVICE	1,034	207	827	-
FOREST SERVICE	52,011	17,684	33,287	1,040
NATIONAL AGRICULTURAL LIBRARY	261	-	261	-
STATISTICAL REPORTING SERVICE	765	87	433	245
DEPARTMENT OF COMMERCE, TOTAL	228,349	59,423	128,360	40,566
ECONOMIC DEVELOPMENT ADMINISTRATION	4,284	-	1,354	2,930
MARITIME ADMINISTRATION	30,674	1,500	23,574	5,600
NATIONAL BUREAU OF STANDARDS	58,536	15,593	35,960	6,983
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	124,441	41,066	62,220	21,155
OFFICE OF MINORITY BUSINESS ENTERPRISE	2,145	-	-	2,145
OFFICE OF TELECOMMUNICATIONS	4,950	871	4,079	-
PATENT OFFICE	606	-	121	485
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	2,713	393	1,052	1,268
DEPARTMENT OF DEFENSE, TOTAL	8,773,795	278,072	1,514,498	6,981,225
DEPARTMENT OF THE ARMY	2,135,525	51,400	285,349	1,798,776
DEPARTMENT OF THE NAVY	2,752,891	93,797	233,721	2,425,373
DEPARTMENT OF THE AIR FORCE	3,343,585	91,975	635,255	2,616,355
DEFENSE AGENCIES	488,294	40,900	356,673	90,721
DEPARTMENTWIDE FUNDS	53,500	-	3,500	50,000
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,957,241	522,860	1,122,982	311,399
FOOD AND DRUG ADMINISTRATION	56,476	-	56,476	-
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	257,793	79,584	127,023	51,186
NATIONAL INSTITUTE OF EDUCATION	125,000	22,256	51,125	51,619
NATIONAL INSTITUTES OF HEALTH	1,368,600	420,100	801,800	146,700
OFFICE OF CHILD DEVELOPMENT	19,400	-	11,000	8,400
OFFICE OF EDUCATION	72,362	375	21,993	49,994
SOCIAL AND REHABILITATION SERVICE	44,972	-	41,472	3,500
SOCIAL SECURITY ADMINISTRATION	12,638	545	12,093	-
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	62,900	-	25,160	37,740
DEPARTMENT OF THE INTERIOR, TOTAL	256,011	68,529	100,107	87,375
BONNEVILLE POWER ADMINISTRATION	3,064	-	647	2,417
BUREAU OF LAND MANAGEMENT	825	-	801	24
BUREAU OF MINES	80,030	6,790	32,825	40,415
BUREAU OF OUTDOOR RECREATION	82	-	82	-
BUREAU OF RECLAMATION	9,089	83	8,842	164
BUREAU OF SPORT FISHERIES AND WILDLIFE	26,061	9,551	13,322	3,188
GEOLOGICAL SURVEY	68,685	46,036	19,703	2,946
NATIONAL PARK SERVICE	1,532	1,125	407	-
OFFICE OF COAL RESEARCH	25,305	-	8,505	16,800
OFFICE OF SALINE WATER	26,006	2,105	4,055	19,846
OFFICE OF THE SECRETARY	2,000	-	425	1,575
OFFICE OF WATER RESOURCES RESEARCH	13,332	2,839	10,493	-

CONTINUED ON NEXT PAGE

TABLE C-6. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND CHARACTER OF WORK, FISCAL YEAR 1973 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	RESEARCH		DEVELOPMENT
		BASIC	APPLIED	
DEPARTMENT OF JUSTICE, TOTAL	27,836	-	16,984	10,852
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	-	1,484	-
BUREAU OF PRISONS	402	-	-	402
FEDERAL BUREAU OF INVESTIGATION	950	-	-	950
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	25,000	-	15,500	9,500
DEPARTMENT OF LABOR, TOTAL	28,724	2,671	13,166	12,887
BUREAU OF LABOR STATISTICS	4,849	1,087	1,810	1,952
EMPLOYMENT STANDARDS ADMINISTRATION	1,874	-	1,874	-
LABOR-MANAGEMENT SERVICES ADMINISTRATION	1,164	1,164	-	-
MANPOWER ADMINISTRATION	18,903	420	7,976	10,507
OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION	676	-	300	376
OFFICE OF THE SECRETARY	1,258	-	1,206	52
DEPARTMENT OF STATE, TOTAL	36,668	-	35,825	843
DEPARTMENTAL FUNDS	750	-	750	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	35,918	-	35,075	843
DEPARTMENT OF TRANSPORTATION, TOTAL	381,009	717	188,885	191,407
FEDERAL AVIATION ADMINISTRATION	113,562	-	30,662	82,900
FEDERAL HIGHWAY ADMINISTRATION	42,249	211	37,475	4,563
FEDERAL RAILROAD ADMINISTRATION	43,900	22	36,441	7,437
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	67,270	-	36,998	30,272
OFFICE OF THE SECRETARY	42,000	425	23,800	17,775
UNITED STATES COAST GUARD	29,168	59	6,365	22,744
URBAN MASS TRANSPORTATION ADMINISTRATION	42,860	-	17,144	25,716
DEPARTMENT OF THE TREASURY, TOTAL	952	-	454	498
BUREAU OF ENGRAVING AND PRINTING	952	-	454	498
OTHER AGENCIES				
ACTION	75		75	-
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	567	-	567	-
APPALACHIAN REGIONAL COMMISSION	3,000	-	3,000	-
ATOMIC ENERGY COMMISSION	1,374,640	282,933	171,152	920,555
CIVIL AERONAUTICS BOARD	297	-	297	-
CIVIL SERVICE COMMISSION	1,452	124	318	1,010
ENVIRONMENTAL PROTECTION AGENCY	185,601	8,300	67,801	109,500
FEDERAL COMMUNICATIONS COMMISSION	803	-	803	-
FEDERAL HOME LOAN BANK BOARD	582	-	582	-
FEDERAL TRADE COMMISSION	633	-	633	-
GENERAL SERVICES ADMINISTRATION	552	-	527	25
LIBRARY OF CONGRESS	2,435	-	1,217	1,218
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	3,274,970	802,797	843,331	1,628,842
NATIONAL SCIENCE FOUNDATION	525,550	401,735	94,915	28,900
OFFICE OF ECONOMIC OPPORTUNITY	112,500	3,317	64,576	44,607
OFFICE OF EMERGENCY PREPAREDNESS	515	-	515	-
OFFICE OF SCIENCE AND TECHNOLOGY	2,091	418	627	1,046
OFFICE OF TELECOMMUNICATIONS POLICY	1,300	-	1,300	-
POSTAL SERVICE	74,277	-	10,246	64,031
SMITHSONIAN INSTITUTION	23,982	23,982	-	-
TENNESSEE VALLEY AUTHORITY	12,294	-	10,146	2,148
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	2,200	-	1,745	455
UNITED STATES INFORMATION AGENCY	100	-	100	-
VETERANS ADMINISTRATION	75,512	3,380	70,713	1,419

TABLE C-7. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRBCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	
TOTAL, ALL AGENCIES....................	15,549.5	4,165.6	7,630.5	480.2	1,644.5	728.9	485.6	210.2	141.1	63.1
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	304.9	226.5	.5	-	71.9	-	.8	-	.4	4.8
AGRICULTURAL RESEARCH SERVICE..........	173.5	162.4	.3	-	5.2	-	.7	-	-	4.8
COOPERATIVE STATE RESEARCH SERVICE.....	67.8	2.1	-	-	65.3	-	-	-	.3	-
ECONOMIC RESEARCH SERVICE..............	15.5	15.1	-	-	.4	-	-	-	*	-
FARMER COOPERATIVE SERVICE.............	1.0	.9	-	-	.1	-	-	-	-	-
FOREST SERVICE.........................	46.0	45.2	*	-	.7	-	.1	-	*	-
NATIONAL AGRICULTURAL LIBRARY..........	.4	.2	.1	-	.1	-	*	-	-	-
STATISTICAL REPORTING SERVICE..........	.7	.6	.1	-	.1	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	143.7	92.4	26.8	-	16.0	*	1.6	-	6.0	.9
ECONOMIC DEVELOPMENT ADMINISTRATION....	4.6	1.3	.8	-	1.0	-	.6	-	.9	-
MARITIME ADMINISTRATION................	20.7	1.8	18.1	-	.5	-	-	-	-	.3
NATIONAL BUREAU OF STANDARDS...........	32.6	31.3	.2	-	.5	-	-	-	*	.6
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	79.0	51.2	7.6	-	14.0	*	1.0	-	5.1	.1
OFFICE OF TELECOMMUNICATIONS...........	2.1	2.1	-	-	-	-	-	-	-	-
PATENT OFFICE..........................	.6	.6	-	-	-	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	4.1	4.1	-	-	*	-	*	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	7,509.0	2,200.9	4,696.5	7.5	210.5	142.0	89.1	151.3	*	11.3
DEPARTMENT OF THE ARMY.................	1,682.4	650.4	933.5	-	25.5	28.4	23.7	15.9	*	4.8
DEPARTMENT OF THE NAVY.................	2,283.7	737.7	1,389.5	-	70.3	72.1	10.2	.3	-	3.5
DEPARTMENT OF THE AIR FORCE............	3,113.5	676.6	2,190.1	-	68.1	25.5	41.4	109.7	-	2.0
DEFENSE AGENCIES.......................	426.5	135.8	182.5	7.1	46.2	15.9	12.9	25.2	-	.9
DEPARTMENTWIDE FUNDS...................	3.0	.4	.8	.3	.4	*	.9	.3	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,476.1	297.5	54.7	-	761.7	7.2	216.5	27.3	76.4	34.8
FOOD AND DRUG ADMINISTRATION...........	25.6	16.4	1.0	-	6.6	-	.7	-	.2	.6
HEALTH SERVICES & MENTAL HEALTH ADMIN..	222.9	61.6	5.0	-	80.0	-	39.4	-	21.9	15.0
NATIONAL INSTITUTES OF HEALTH..........	1,039.0	204.6	46.6	-	603.4	.4	145.8	1.1	21.9	15.2
OFFICE OF CHILD DEVELOPMENT............	11.2	.3	.3	-	6.7	-	3.3	-	.4	-
OFFICE OF EDUCATION....................	132.4	3.9	1.6	-	48.8	6.7	18.4	26.2	26.9	-
SOCIAL AND REHABILITATION SERVICE......	34.1	.3	-	-	15.9	-	8.8	-	5.0	4.0
SOCIAL SECURITY ADMINISTRATION.........	10.9	10.3	.2	-	.4	-	*	-	*	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	47.7	4.2	38.0	-	.7	.6	1.1	-	3.3	-
DEPARTMENT OF THE INTERIOR, TOTAL......	193.7	111.8	40.2	1.4	21.1	-	4.6	.8	13.6	.2
BONNEVILLE POWER ADMINISTRATION........	1.9	1.0	.6	-	.2	-	-	-	*	.1
BUREAU OF LAND MANAGEMENT..............	.8	.4	-	-	.3	-	-	-	*	-
BUREAU OF MINES........................	60.3	47.7	8.5	-	2.3	-	.9	.8	.1	-
BUREAU OF OUTDOOR RECREATION...........	.2	.1	-	-	*	-	.1	-	-	-
BUREAU OF RECLAMATION..................	9.2	3.5	1.3	-	3.8	-	-	-	.6	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	23.0	13.1	-	-	.5	-	.2	-	9.2	-
GEOLOGICAL SURVEY......................	44.1	42.9	.3	-	.8	-	-	-	.1	-
NATIONAL PARK SERVICE..................	1.1	.5	-	-	.7	-	-	-	-	-
OFFICE OF COAL RESEARCH................	16.4	.5	12.6	-	.9	-	2.4	-	-	-
OFFICE OF SALINE WATER.................	24.0	1.3	15.9	1.4	1.7	-	.5	-	3.2	.1
OFFICE OF THE SECRETARY................	.2	*	-	-	.1	-	-	-	.1	-
OFFICE OF WATER RESOURCES RESEARCH.....	12.4	.8	1.0	-	9.8	-	.5	-	.3	-
DEPARTMENT OF JUSTICE, TOTAL...........	10.3	1.5	1.7	-	3.1	-	2.5	-	1.5	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1.5	.2	.5	-	.6	-	.2	-	-	-
BUREAU OF PRISONS......................	.4	.2	*	-	.1	-	*	-	*	-
FEDERAL BUREAU OF INVESTIGATION........	1.0	.1	.9	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	7.5	1.1	.4	-	2.4	-	2.3	-	1.4	-

CONTINUED ON NEXT PAGE

TABLE C-7. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

CONTINUED

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	FOREIGN
DEPARTMENT OF LABOR, TOTAL	22.8	9.8	1.7	-	4.2	-	4.9	-	2.3	-
BUREAU OF LABOR STATISTICS	3.8	3.8	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION	1.5	1.4	-	-	.1	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN	.5	.5	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION	16.5	3.6	1.7	-	4.1	-	4.8	-	2.3	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN	.3	.3	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	.2	.1	*	-	-	-	.1	-	-	-
DEPARTMENT OF STATE, TOTAL	30.1	6.2	-	-	14.7	-	3.8	*	.1	5.2
DEPARTMENTAL FUNDS	.4	.1	-	-	.1	-	*	*	.1	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	29.7	6.1	-	-	14.6	-	3.8	-	-	5.2
DEPARTMENT OF TRANSPORTATION, TOTAL	482.5	101.4	333.6	*	9.9	6.1	2.1	7.0	22.3	.1
FEDERAL AVIATION ADMINISTRATION	346.3	56.6	285.5	-	.4	-	-	3.7	-	-
FEDERAL HIGHWAY ADMINISTRATION	26.8	4.3	4.3	-	1.1	.1	.5	*	16.4	-
FEDERAL RAILROAD ADMINISTRATION	21.6	12.6	7.2	-	.8	-	.1	.9	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN	26.7	8.6	13.8	-	2.5	-	1.1	.1	.6	-
OFFICE OF THE SECRETARY	15.3	4.9	8.6	*	1.2	.2	-	.3	-	.1
UNITED STATES COAST GUARD	21.6	9.5	11.9	-	.2	-	-	-	-	*
URBAN MASS TRANSPORTATION ADMIN	24.3	4.8	2.3	-	3.7	5.9	.4	1.9	5.4	-
DEPARTMENT OF THE TREASURY, TOTAL	.8	.8	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING	.8	.8	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION	.1	*	.1	-	-	-	*	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	.5	.5	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION	3.0	-	-	-	.1	-	-	-	2.9	-
ATOMIC ENERGY COMMISSION	1,302.9	16.8	265.6	465.6	93.9	432.3	8.2	19.7	.2	.6
CIVIL AERONAUTICS BOARD	.3	.3	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION	.6	.6	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	136.7	58.6	47.6	-	17.0	-	1.8	.2	9.0	2.5
FEDERAL COMMUNICATIONS COMMISSION	.6	.6	-	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD	.4	.4	-	-	-	-	-	-	-	-
FEDERAL TRADE COMMISSION	.4	.4	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION	.2	.1	*	-	*	-	*	-	-	-
LIBRARY OF CONGRESS	2.5	2.4	*	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	3,257.9	909.1	2,073.6	3.1	134.0	109.2	26.8	.4	-	1.8
NATIONAL SCIENCE FOUNDATION	336.9	19.4	3.5	2.6	266.6	31.5	7.8	1.9	2.9	.8
OFFICE OF ECONOMIC OPPORTUNITY	153.1	11.5	11.4	-	16.4	-	112.6	1.3	-	-
OFFICE OF EMERGENCY PREPAREDNESS	.6	.3	.2	-	-	-	.1	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY	2.0	2.0	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY	.2	.1	-	-	-	-	.1	-	-	-
POSTAL SERVICE	39.7	5.1	34.0	-	*	-	.3	.3	-	*
SMITHSONIAN INSTITUTION	15.1	13.3	-	-	1.7	-	.1	-	*	-
TENNESSEE VALLEY AUTHORITY	9.3	9.2	-	-	.1	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY	1.7	.8	.5	-	*	-	.4	-	-	-
UNITED STATES INFORMATION AGENCY	.1	.1	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION	62.9	61.1	.4	-	.9	-	.3	-	.2	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-8. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES....................	16,820.9	4,509.1	8,120.6	515.1	1,915.3	782.7	510.3	197.4	187.5	82.8
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	348.5	251.2	1.0	-	84.5	-	.4	-	.4	11.2
AGRICULTURAL RESEARCH SERVICE..........	198.5	183.1	.3	-	3.6	-	.3	-	-	11.2
COOPERATIVE STATE RESEARCH SERVICE.....	82.3	2.5	-	-	79.4	-	-	-	.3	-
ECONOMIC RESEARCH SERVICE..............	15.6	15.4	-	-	.2	-	-	-	-	-
FARMER COOPERATIVE SERVICE.............	1.0	1.0	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	50.1	48.4	.6	-	1.2	-	*	-	*	-
NATIONAL AGRICULTURAL LIBRARY..........	.2	.2	-	-	.1	-	*	-	-	-
STATISTICAL REPORTING SERVICE..........	.7	.5	.1	-	.1	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	173.3	109.1	32.7	-	20.4	-	4.2	-	6.3	.7
ECONOMIC DEVELOPMENT ADMINISTRATION....	4.2	1.4	.8	-	1.2	-	.3	-	.6	-
MARITIME ADMINISTRATION................	24.5	2.6	21.6	-	.3	-	-	-	-	.1
NATIONAL BUREAU OF STANDARDS...........	35.3	34.1	.2	-	.5	-	-	-	*	.5
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	100.2	63.0	9.7	-	18.4	-	3.3	-	5.7	.1
OFFICE OF MINORITY BUSINESS ENTERPRISE.	1.0	*	.4	-	-	-	.6	-	-	-
OFFICE OF TELECOMMUNICATIONS...........	3.8	3.8	-	-	-	-	-	-	-	-
PATENT OFFICE..........................	.6	.6	-	-	-	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	3.7	3.6	-	-	.1	-	*	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	8,374.1	2,418.3	5,342.2	6.0	207.9	143.1	97.7	142.4	.2	16.2
DEPARTMENT OF THE ARMY.................	2,101.8	699.5	1,312.5	-	24.8	20.2	25.7	15.2	.2	3.7
DEPARTMENT OF THE NAVY.................	2,550.0	813.0	1,573.6	-	66.5	78.5	7.5	1.1	-	9.8
DEPARTMENT OF THE AIR FORCE............	3,195.5	760.3	2,199.5	-	65.8	26.1	39.8	102.3	-	1.8
DEFENSE AGENCIES.......................	473.1	142.6	210.4	5.7	48.0	18.4	23.6	23.4	-	.9
DEPARTMENTWIDE FUNDS...................	53.7	2.9	46.2	.3	2.8	-	1.1	.4	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,763.5	334.1	81.1	-	908.9	9.0	262.7	26.1	101.7	39.9
FOOD AND DRUG ADMINISTRATION...........	37.8	23.2	1.2	-	6.0	-	1.3	-	.5	5.4
HEALTH SERVICES & MENTAL HEALTH ADMIN..	247.4	77.8	4.6	-	87.6	-	43.1	-	22.2	12.1
NATIONAL INSTITUTES OF HEALTH..........	1,266.4	216.2	73.1	-	745.5	.5	187.4	1.5	27.9	14.3
OFFICE OF CHILD DEVELOPMENT............	17.6	.5	.9	-	9.7	-	5.3	-	1.2	-
OFFICE OF EDUCATION....................	140.1	4.3	1.2	-	43.0	8.4	15.1	24.6	43.5	-
SOCIAL AND REHABILITATION SERVICE......	41.8	.1	-	-	16.9	-	10.5	-	6.3	8.0
SOCIAL SECURITY ADMINISTRATION.........	12.4	12.0	.1	-	.2	-	.1	-	*	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	53.3	7.3	34.7	-	.9	-	4.0	-	6.4	-
DEPARTMENT OF THE INTERIOR, TOTAL......	224.0	127.2	50.8	1.4	27.2	-	6.3	-	10.4	.7
BONNEVILLE POWER ADMINISTRATION........	3.4	1.8	1.3	-	.2	-	-	-	-	.1
BUREAU OF LAND MANAGEMENT..............	.8	.5	-	-	.3	-	-	-	*	-
BUREAU OF MINES........................	70.3	52.8	14.0	-	2.5	-	1.0	-	-	-
BUREAU OF OUTDOOR RECREATION...........	.1	.1	-	-	-	-	-	-	-	-
BUREAU OF RECLAMATION..................	9.9	4.2	.9	-	4.1	-	-	-	.6	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	23.9	13.9	-	-	.4	-	.2	-	9.4	-
GEOLOGICAL SURVEY......................	54.0	50.3	1.2	-	2.4	-	-	-	*	.1
NATIONAL PARK SERVICE..................	1.2	.5	-	-	.7	-	-	-	-	-
OFFICE OF COAL RESEARCH................	20.8	.6	10.9	-	4.6	-	4.7	-	-	-
OFFICE OF SALINE WATER.................	24.3	1.4	19.5	1.4	1.5	-	.4	-	-	.1
OFFICE OF THE SECRETARY................	2.0	.1	1.4	-	*	-	-	-	-	.5
OFFICE OF WATER RESOURCES RESEARCH.....	13.3	.9	1.5	-	10.6	-	.1	-	.3	-
DEPARTMENT OF JUSTICE, TOTAL...........	23.3	2.4	6.5	-	3.3	-	1.4	-	9.6	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1.5	.1	.7	-	.3	-	.4	-	-	-
BUREAU OF PRISONS......................	.4	.2	*	-	.1	-	*	-	*	-
FEDERAL BUREAU OF INVESTIGATION........	.5	.1	.3	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	21.0	2.0	5.5	-	3.0	-	.9	-	9.6	-

CONTINUED ON NEXT PAGE

TABLE C-8. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

CONTINUED

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	FOREIGN
DEPARTMENT OF LABOR, TOTAL.............	26.8	11.8	1.9	-	4.9	-	5.5	*	2.6	-
BUREAU OF LABOR STATISTICS.............	4.5	4.5	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1.9	1.7	-	-	.2	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	.9	.9	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	18.9	4.2	1.9	-	4.7	-	5.5	-	2.6	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	.4	.4	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	.3	.2	*	-	*	-	*	*	-	-
DEPARTMENT OF STATE, TOTAL.............	26.4	3.8	.1	-	16.8	-	1.9	.1	.3	3.5
DEPARTMENTAL FUNDS.....................	.6	.1	.1	-	-	-	*	.1	.3	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	25.9	3.7	-	-	16.8	-	1.9	-	-	3.5
DEPARTMENT OF TRANSPORTATION, TOTAL....	364.5	110.9	198.8	-	11.0	4.9	5.5	5.8	27.6	-
FEDERAL AVIATION ADMINISTRATION........	170.8	53.2	114.2	-	.9	-	-	2.5	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	27.4	4.4	4.4	-	.7	.1	.5	.1	17.4	-
FEDERAL RAILROAD ADMINISTRATION........	25.0	14.1	9.2	-	.6	-	-	1.1	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	53.1	17.0	27.5	-	5.0	-	1.8	.6	1.1	-
OFFICE OF THE SECRETARY................	26.9	8.7	17.7	-	.5	*	-	-	-	-
UNITED STATES COAST GUARD..............	32.7	7.9	21.7	-	.4	-	2.7	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	28.6	5.7	4.0	-	3.0	4.8	.5	1.5	9.2	-
DEPARTMENT OF THE TREASURY, TOTAL......	1.0	1.0	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	1.0	1.0	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION.................................	*	*	*	-	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	.6	.6	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION........	3.0	-	-	-	.1	-	-	-	2.9	-
ATOMIC ENERGY COMMISSION...............	1,307.8	15.0	236.0	504.0	88.1	440.6	6.9	16.2	.1	.8
CIVIL AERONAUTICS BOARD................	.3	.3	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION...............	1.1	.7	-	-	-	-	-	-	.4	-
ENVIRONMENTAL PROTECTION AGENCY........	175.8	66.6	64.0	-	21.1	-	2.0	.2	14.2	7.6
FEDERAL COMMUNICATIONS COMMISSION......	.8	.6	.2	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD...........	.5	.5	-	-	-	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	.6	.6	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION........	.8	.2	.3	-	-	-	.1	-	.2	-
LIBRARY OF CONGRESS....................	2.4	2.4	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	3,208.0	911.9	1,995.1	.6	132.0	148.5	19.0	.1	-	.9
NATIONAL SCIENCE FOUNDATION............	451.1	19.1	2.5	3.2	370.9	36.7	7.5	6.0	3.9	1.3
OFFICE OF ECONOMIC OPPORTUNITY.........	118.9	7.7	14.2	-	14.0	-	83.0	-	-	-
OFFICE OF EMERGENCY PREPAREDNESS.......	.5	.3	.2	-	-	-	.1	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	2.0	2.0	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY....	.8	.1	-	-	-	-	.7	-	-	-
POSTAL SERVICE.........................	68.0	9.1	57.4	-	.1	-	.9	.5	-	*
SMITHSONIAN INSTITUTION................	18.8	16.5	-	*	2.1	-	.1	-	.1	-
TENNESSEE VALLEY AUTHORITY.............	10.9	10.8	-	-	.1	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1.6	.8	.5	-	.1	-	.2	-	-	-
UNITED STATES INFORMATION AGENCY.......	.2	.1	*	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	68.0	66.2	.5	-	.9	-	.3	-	.2	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-9. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES	17,790.8	4,597.8	8,682.9	553.3	2,126.1	817.9	484.2	207.5	227.5	93.6
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	361.4	248.2	1.9	-	90.0	-	.4	-	.5	20.4
AGRICULTURAL RESEARCH SERVICE	203.2	178.7	.3	-	3.6	-	.3	-	-	20.4
COOPERATIVE STATE RESEARCH SERVICE	87.3	2.5	-	-	84.4	-	-	-	.4	-
ECONOMIC RESEARCH SERVICE	16.8	16.2	-	-	.5	-	-	-	.1	-
FARMER COOPERATIVE SERVICE	1.0	1.0	-	-	-	-	-	-	-	-
FOREST SERVICE	52.0	49.1	1.5	-	1.4	-	*	-	*	-
NATIONAL AGRICULTURAL LIBRARY	.3	.2	-	-	.1	-	*	-	-	-
STATISTICAL REPORTING SERVICE	.8	.5	.1	-	.1	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	228.3	122.6	51.2	-	41.5	-	3.2	-	8.6	1.2
ECONOMIC DEVELOPMENT ADMINISTRATION	4.3	1.5	.8	-	1.2	-	.3	-	.6	-
MARITIME ADMINISTRATION	30.7	3.4	26.6	-	.7	-	-	-	-	.1
NATIONAL BUREAU OF STANDARDS	58.5	40.6	11.1	-	5.0	-	-	-	1.0	.8
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	124.4	69.0	12.0	-	34.4	-	1.6	-	7.0	.4
OFFICE OF MINORITY BUSINESS ENTERPRISE.	2.1	.1	.7	-	.1	-	1.2	-	-	-
OFFICE OF TELECOMMUNICATIONS	5.0	5.0	-	-	-	-	-	-	-	-
PATENT OFFICE	.6	.6	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN	2.7	2.6	-	-	.1	-	*	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	8,773.8	2,420.6	5,734.0	4.0	218.9	149.9	82.7	153.0	.1	10.7
DEPARTMENT OF THE ARMY	2,135.5	694.5	1,347.7	.1	28.9	19.3	27.4	16.2	.1	1.2
DEPARTMENT OF THE NAVY	2,752.9	816.3	1,763.1	-	68.9	89.7	7.3	.9	-	6.7
DEPARTMENT OF THE AIR FORCE	3,343.6	765.9	2,336.6	-	64.4	23.0	38.0	113.8	-	1.9
DEFENSE AGENCIES	488.3	140.9	240.4	3.8	53.7	17.8	9.1	21.7	-	.9
DEPARTMENTWIDE FUNDS	53.5	3.0	46.2	.1	2.9	*	.9	.4	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,957.2	369.8	94.0	-	1,002.2	8.9	296.5	25.5	118.4	42.0
FOOD AND DRUG ADMINISTRATION	56.5	28.9	4.0	-	12.9	-	3.9	-	1.2	5.5
HEALTH SERVICES & MENTAL HEALTH ADMIN.	257.8	78.5	4.7	-	95.5	-	43.3	-	23.5	12.3
NATIONAL INSTITUTE OF EDUCATION	125.0	21.5	-	-	27.4	8.3	11.0	23.8	33.0	-
NATIONAL INSTITUTES OF HEALTH	1,368.6	225.9	82.6	-	808.5	.6	204.7	1.7	30.4	14.2
OFFICE OF CHILD DEVELOPMENT	19.4	.6	1.9	-	8.7	-	5.8	-	2.3	-
OFFICE OF EDUCATION	72.4	1.8	.8	-	30.8	-	17.2	-	21.8	-
SOCIAL AND REHABILITATION SERVICE	45.0	.1	-	-	18.1	-	10.6	-	6.2	10.0
SOCIAL SECURITY ADMINISTRATION	12.6	12.4	-	-	.2	-	.1	-	*	-
DEPARTMENT OF HOUSING & URBAN DEVELOP.	62.9	10.7	37.1	-	1.0	-	5.3	-	8.8	-
DEPARTMENT OF THE INTERIOR, TOTAL	256.0	142.1	64.1	1.4	30.3	-	5.6	-	11.5	1.0
BONNEVILLE POWER ADMINISTRATION	3.1	1.5	1.4	-	.1	-	-	-	-	-
BUREAU OF LAND MANAGEMENT	.8	.5	-	-	.3	-	-	-	*	-
BUREAU OF MINES	80.0	55.3	20.0	-	2.7	-	1.0	-	1.0	-
BUREAU OF OUTDOOR RECREATION	.1	.1	-	-	-	-	-	-	-	-
BUREAU OF RECLAMATION	9.1	4.0	1.1	-	3.5	-	-	-	.6	-
BUREAU OF SPORT FISHERIES & WILDLIFE	26.1	15.7	-	-	.6	-	.2	-	9.6	-
GEOLOGICAL SURVEY	68.7	61.2	2.3	-	5.1	-	-	-	.1	-
NATIONAL PARK SERVICE	1.5	.5	-	-	1.0	-	-	-	-	-
OFFICE OF COAL RESEARCH	25.3	.8	15.9	-	4.7	-	3.8	-	-	-
OFFICE OF SALINE WATER	26.0	1.4	21.0	1.4	1.7	-	.5	-	-	-
OFFICE OF THE SECRETARY	2.0	.1	.9	-	*	-	-	-	-	1.0
OFFICE OF WATER RESOURCES RESEARCH	13.3	.9	1.5	-	10.5	-	.2	-	.3	-
DEPARTMENT OF JUSTICE, TOTAL	27.8	3.8	8.5	-	4.9	-	1.2	-	9.5	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1.5	.1	.7	-	.3	-	.4	-	-	-
BUREAU OF PRISONS	.4	.3	*	-	.1	-	*	-	*	-
FEDERAL BUREAU OF INVESTIGATION	1.0	.2	.8	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN	25.0	3.3	7.0	-	4.5	-	.7	-	9.5	-

CONTINUED ON NEXT PAGE

TABLE C-9. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

CONTINUED

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	
DEPARTMENT OF LABOR, TOTAL.............	28.7	13.2	1.9	-	5.3	-	5.7	*	2.6	-
BUREAU OF LABOR STATISTICS.............	4.8	4.8	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1.9	1.9	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	1.2	1.2	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	18.9	4.2	1.9	-	4.7	-	5.5	-	2.6	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	.7	.7	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	1.3	.5	*	-	.5	-	.2	*	-	-
DEPARTMENT OF STATE, TOTAL.............	36.7	8.3	.1	-	22.8	-	.8	.1	.5	4.2
DEPARTMENTAL FUNDS.....................	.8	.1	.1	-	-	-	*	.1	.5	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	35.9	8.2	-	-	22.8	-	.8	-	-	4.2
DEPARTMENT OF TRANSPORTATION, TOTAL....	381.0	117.8	184.5	1.9	19.7	7.3	4.3	3.3	42.1	-
FEDERAL AVIATION ADMINISTRATION........	113.6	35.4	77.5	-	.8	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	42.2	6.8	6.8	-	.7	.1	.8	.1	27.0	-
FEDERAL RAILROAD ADMINISTRATION........	43.9	26.8	14.7	1.5	.8	-	-	.1	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	67.3	21.6	35.2	-	8.0	-	.4	.7	1.4	-
OFFICE OF THE SECRETARY................	42.0	11.7	24.3	.5	5.5	.1	-	-	-	-
UNITED STATES COAST GUARD..............	29.2	7.0	19.2	-	.5	-	2.4	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	42.9	8.5	6.9	-	3.5	7.2	.7	2.3	13.7	-
DEPARTMENT OF THE TREASURY, TOTAL......	1.0	1.0	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	1.0	1.0	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION.................................	.1	*	*	-	*	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	.6	.6	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION........	3.0	-	-	-	.1	-	-	-	2.9	-
ATOMIC ENERGY COMMISSION...............	1,374.6	16.2	237.6	541.3	88.9	467.3	5.6	16.4	.1	1.2
CIVIL AERONAUTICS BOARD................	.3	.3	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION...............	1.5	.7	-	-	-	-	-	-	.8	-
ENVIRONMENTAL PROTECTION AGENCY........	185.6	71.2	70.2	-	19.8	-	2.0	.2	15.3	6.8
FEDERAL COMMUNICATIONS COMMISSION......	.8	.6	.2	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD...........	.6	.4	-	-	.2	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	.6	.6	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION........	.6	.1	*	-	-	-	*	-	.4	-
LIBRARY OF CONGRESS....................	2.4	2.4	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	3,275.0	898.7	2,076.5	.5	130.0	146.2	22.0	.1	-	.9
NATIONAL SCIENCE FOUNDATION............	525.6	19.9	5.7	4.1	435.0	38.4	4.1	8.3	5.1	5.0
OFFICE OF ECONOMIC OPPORTUNITY.........	112.5	7.1	52.4	-	11.0	-	42.0	-	-	-
OFFICE OF EMERGENCY PREPAREDNESS.......	.5	.3	.2	-	-	-	.1	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	2.1	2.1	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY....	1.3	.1	-	-	-	-	1.2	-	-	-
POSTAL SERVICE.........................	74.3	12.0	61.0	-	.1	-	.6	.5	-	.1
SMITHSONIAN INSTITUTION................	24.0	20.6	-	*	3.1	-	.2	-	.1	-
TENNESSEE VALLEY AUTHORITY.............	12.3	12.1	-	-	.2	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	2.2	.7	1.1	-	.1	-	.3	-	-	-
UNITED STATES INFORMATION AGENCY.......	.1	.1	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	75.5	73.0	.7	-	1.2	-	.5	-	.2	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-10. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES....................	6,150,207	2,033,163	1,626,908	75,675	1,495,662	398,906	314,289	52,373	100,523	52,708
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	292,152	214,831	440	-	71,745	-	783	-	363	3,990
AGRICULTURAL RESEARCH SERVICE..........	161,846	151,887	252	-	5,016	-	701	-	-	3,990
COOPERATIVE STATE RESEARCH SERVICE.....	67,762	2,112	-	-	65,343	-	-	-	307	-
ECONOMIC RESEARCH SERVICE..............	15,534	15,106	-	-	380	-	-	-	48	-
FARMER COOPERATIVE SERVICE.............	1,017	920	-	-	97	-	-	-	-	-
FOREST SERVICE.........................	45,111	44,286	6	-	743	-	68	-	8	-
NATIONAL AGRICULTURAL LIBRARY..........	391	183	94	-	100	-	14	-	-	-
STATISTICAL REPORTING SERVICE..........	491	337	88	-	66	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	113,674	79,126	12,731	-	14,837	35	1,422	-	4,669	854
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	635	86	-	528	-	477	-	-	-
MARITIME ADMINISTRATION................	13,205	1,496	10,941	-	518	-	-	-	-	250
NATIONAL BUREAU OF STANDARDS...........	28,655	27,520	124	-	451	-	-	-	11	549
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	65,561	45,010	1,580	-	13,308	35	915	-	4,658	55
OFFICE OF TELECOMMUNICATIONS...........	2,107	2,107	-	-	-	-	-	-	-	-
PATENT OFFICE..........................	412	412	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,008	1,946	-	-	32	-	30	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,612,955	614,448	697,646	2,568	195,825	28,832	38,670	31,376	15	3,575
DEPARTMENT OF THE ARMY.................	339,126	223,624	74,958	-	23,337	115	8,367	7,610	15	1,100
DEPARTMENT OF THE NAVY.................	273,150	155,816	36,576	-	62,811	12,518	5,298	-	-	131
DEPARTMENT OF THE AIR FORCE............	677,186	146,809	450,438	-	64,612	250	13,589	-	-	1,488
DEFENSE AGENCIES.......................	320,466	87,846	134,912	2,258	44,624	15,909	10,560	23,501	-	856
DEPARTMENTWIDE FUNDS...................	3,027	353	762	310	441	40	856	265	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,302,330	278,167	37,898	-	698,178	4,925	189,235	3,345	56,158	34,424
FOOD AND DRUG ADMINISTRATION...........	25,643	16,438	1,038	-	6,646	-	709	-	196	616
HEALTH SERVICES & MENTAL HEALTH ADMIN..	179,157	54,049	551	-	65,406	-	26,095	-	18,083	14,973
NATIONAL INSTITUTES OF HEALTH..........	963,900	195,313	35,771	-	577,810	223	138,441	1,108	20,069	15,165
OFFICE OF CHILD DEVELOPMENT............	7,852	235	236	-	4,711	-	2,356	-	314	-
OFFICE OF EDUCATION....................	62,773	1,511	126	-	27,871	4,702	13,372	2,237	12,954	-
SOCIAL AND REHABILITATION SERVICE......	32,072	308	-	-	15,348	-	8,229	-	4,517	3,670
SOCIAL SECURITY ADMINISTRATION.........	10,933	10,313	176	-	386	-	33	-	25	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	10,496	2,629	4,873	-	665	550	823	-	956	-
DEPARTMENT OF THE INTERIOR, TOTAL......	139,071	94,431	11,613	285	20,300	-	2,020	-	10,350	72
BONNEVILLE POWER ADMINISTRATION........	341	124	137	-	80	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	755	407	-	-	308	-	-	-	40	-
BUREAU OF MINES........................	38,739	34,466	1,695	-	2,308	-	270	-	-	-
BUREAU OF OUTDOOR RECREATION...........	185	85	-	-	25	-	75	-	-	-
BUREAU OF RECLAMATION..................	9,137	3,471	1,303	-	3,806	-	-	-	557	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	20,994	11,034	-	-	535	-	176	-	9,249	-
GEOLOGICAL SURVEY......................	44,146	42,912	303	-	798	-	-	-	133	-
NATIONAL PARK SERVICE..................	1,141	483	-	-	658	-	-	-	-	-
OFFICE OF COAL RESEARCH................	4,955	149	3,861	-	391	-	554	-	-	-
OFFICE OF SALINE WATER.................	6,110	460	3,329	285	1,565	-	399	-	-	72
OFFICE OF THE SECRETARY................	153	25	-	-	50	-	-	-	78	-
OFFICE OF WATER RESOURCES RESEARCH.....	12,415	815	985	-	9,776	-	546	-	293	-
DEPARTMENT OF JUSTICE, TOTAL...........	6,525	492	779	-	2,500	-	2,069	-	685	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,495	184	506	-	595	-	210	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	5,030	308	273	-	1,905	-	1,859	-	685	-

CONTINUED ON NEXT PAGE

TABLE C-10. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	FOREIGN
DEPARTMENT OF LABOR, TOTAL............	13,622	7,053	823	-	2,128	-	2,466	-	1,152	-
BUREAU OF LABOR STATISTICS.............	2,853	2,853	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	1,431	-	-	70	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	547	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,233	1,812	823	-	2,058	-	2,388	-	1,152	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	326	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	162	84	-	-	-	-	78	-	-	-
DEPARTMENT OF STATE, TOTAL.............	28,975	6,158	-	-	13,907	-	3,554	38	110	5,208
DEPARTMENTAL FUNDS.....................	350	104	-	-	54	-	44	38	110	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	28,625	6,054	-	-	13,853	-	3,510	-	-	5,208
DEPARTMENT OF TRANSPORTATION, TOTAL....	173,179	53,286	89,076	2	8,133	250	1,719	3,246	17,463	4
FEDERAL AVIATION ADMINISTRATION........	93,492	25,980	67,121	-	391	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	23,868	3,805	3,803	-	1,141	100	475	16	14,528	-
FEDERAL RAILROAD ADMINISTRATION........	17,950	9,677	6,771	-	639	-	-	863	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	14,702	6,175	4,786	-	2,030	-	1,147	123	441	-
OFFICE OF THE SECRETARY................	8,693	2,594	4,432	2	1,202	150	-	313	-	-
UNITED STATES COAST GUARD..............	4,749	2,429	2,114	-	202	-	-	-	-	4
URBAN MASS TRANSPORTATION ADMIN........	9,725	2,626	49	-	2,523	-	97	1,931	2,494	-
DEPARTMENT OF THE TREASURY, TOTAL......	383	383	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	383	383	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION.................................	103	31	60	-	-	-	12	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	544	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION........	2,980	-	-	-	113	-	-	-	2,867	-
ATOMIC ENERGY COMMISSION...............	428,991	4,909	2,977	69,559	89,649	244,724	4,538	11,956	103	576
CIVIL AERONAUTICS BOARD................	277	277	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION...............	369	369	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	53,818	19,561	12,464	-	16,134	-	1,095	230	2,686	1,648
FEDERAL COMMUNICATIONS COMMISSION......	616	616	-	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD...........	395	395	-	-	-	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	440	440	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION........	93	55	-	-	-	-	38	-	-	-
LIBRARY OF CONGRESS....................	982	962	20	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,496,950	547,001	742,143	702	96,435	88,173	20,786	113	-	1,597
NATIONAL SCIENCE FOUNDATION............	318,286	17,272	3,530	2,559	253,651	31,417	5,779	581	2,737	760
OFFICE OF ECONOMIC OPPORTUNITY.........	63,112	5,925	8,644	-	8,940	-	38,386	1,217	-	-
OFFICE OF EMERGENCY PREPAREDNESS.......	577	272	230	-	-	-	75	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,015	1,015	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY....	177	50	-	-	-	-	127	-	-	-
POSTAL SERVICE.........................	1,012	335	383	-	23	-	-	271	-	-
SMITHSONIAN INSTITUTION................	15,082	13,294	-	-	1,691	-	67	-	30	-
TENNESSEE VALLEY AUTHORITY.............	7,455	7,324	-	-	131	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,354	540	401	-	40	-	373	-	-	-
UNITED STATES INFORMATION AGENCY.......	108	108	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	62,109	60,864	177	-	637	-	252	-	179	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-11. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	
TOTAL, ALL AGENCIES....................	6,749,448	2,171,917	1,705,233	76,242	1,757,392	441,980	360,493	52,239	1[illegible]1,793	62,159
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	334,567	239,213	944	-	84,484	-	355	-	353	9,218
AGRICULTURAL RESEARCH SERVICE...........	185,750	172,404	229	-	3,560	-	339	-	-	9,218
COOPERATIVE STATE RESEARCH SERVICE.....	82,272	2,516	-	-	79,413	-	-	-	343	-
ECONOMIC RESEARCH SERVICE...............	15,638	15,438	-	-	200	-	-	-	-	-
FARMER COOPERATIVE SERVICE..............	1,034	1,034	-	-	-	-	-	-	-	-
FOREST SERVICE..........................	49,123	47,353	575	-	1,174	-	11	-	10	-
NATIONAL AGRICULTURAL LIBRARY...........	249	187	-	-	57	-	5	-	-	-
STATISTICAL REPORTING SERVICE...........	501	281	140	-	80	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL...........	143,944	93,738	22,269	-	18,813	-	3,346	-	5,179	599
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	586	100	-	433	-	165	-	-	-
MARITIME ADMINISTRATION.................	22,895	2,520	20,010	-	315	-	-	-	-	50
NATIONAL BUREAU OF STANDARDS...........	30,881	29,796	155	-	457	-	-	-	24	449
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	83,172	55,216	2,004	-	17,533	-	3,[illegible]64	-	5,155	100
OFFICE OF TELECOMMUNICATIONS............	3,774	3,774	-	-	-	-	-	-	-	-
PATENT OFFICE...........................	290	290	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,648	1,556	-	-	75	-	17	-	-	-
DEPARTMENT OF DEFENSE, TOTAL............	1,693,428	653,417	728,856	3,982	193,782	33,273	49,529	27,005	152	3,432
DEPARTMENT OF THE ARMY..................	316,025	225,399	51,221	-	24,004	160	9,170	4,937	152	982
DEPARTMENT OF THE NAVY..................	311,764	178,146	52,915	-	60,381	14,451	5,723	-	-	148
DEPARTMENT OF THE AIR FORCE.............	695,022	158,456	459,102	-	62,709	290	13,065	-	-	1,400
DEFENSE AGENCIES........................	366,917	91,029	164,453	3,682	46,346	18,372	20,435	21,698	-	902
DEPARTMENTWIDE FUNDS....................	3,700	387	1,165	300	342	-	1,136	370	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,513,995	307,477	48,660	-	821,546	3,867	221,374	3,890	68,174	39,007
FOOD AND DRUG ADMINISTRATION............	37,762	23,239	1,230	-	6,025	-	1,307	-	519	5,442
HEALTH SERVICES & MENTAL HEALTH ADMIN..	198,659	69,523	374	-	71,518	-	27,897	-	17,209	12,138
NATIONAL INSTITUTES OF HEALTH...........	1,162,200	200,683	46,323	-	704,917	267	168,475	1,490	25,755	14,290
OFFICE OF CHILD DEVELOPMENT.............	9,600	288	480	-	5,280	-	2,880	-	672	-
OFFICE OF EDUCATION.....................	54,433	1,650	153	-	17,435	3,600	10,907	2,400	18,288	-
SOCIAL AND REHABILITATION SERVICE......	38,954	100	-	-	16,189	-	9,822	-	5,706	7,137
SOCIAL SECURITY ADMINISTRATION..........	12,387	11,994	100	-	182	-	86	-	25	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	21,846	5,462	11,928	-	806	-	2,421	-	1,229	-
DEPARTMENT OF THE INTERIOR, TOTAL......	154,511	103,901	12,783	300	23,692	-	3,121	-	10,405	309
BONNEVILLE POWER ADMINISTRATION.........	580	132	328	-	120	-	-	-	-	-
BUREAU OF LAND MANAGEMENT...............	813	468	-	-	305	-	-	-	40	-
BUREAU OF MINES.........................	40,577	35,277	2,500	-	2,500	-	300	-	-	-
BUREAU OF OUTDOOR RECREATION............	85	85	-	-	-	-	-	-	-	-
BUREAU OF RECLAMATION...................	9,711	4,056	943	-	4,074	-	-	-	638	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	21,752	11,779	-	-	408	-	155	-	9,410	-
GEOLOGICAL SURVEY.......................	52,762	49,883	360	-	2,378	-	-	-	35	106
NATIONAL PARK SERVICE...................	1,208	549	-	-	659	-	-	-	-	-
OFFICE OF COAL RESEARCH.................	7,500	216	3,739	-	1,263	-	2,282	-	-	-
OFFICE OF SALINE WATER..................	5,785	510	3,225	300	1,400	-	300	-	-	50
OFFICE OF THE SECRETARY.................	405	13	207	-	32	-	-	-	-	153
OFFICE OF WATER RESOURCES RESEARCH.....	13,333	933	1,481	-	10,553	-	84	-	282	-
DEPARTMENT OF JUSTICE, TOTAL............	14,484	1,018	3,988	-	2,397	-	934	-	6,147	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	63	665	-	322	-	434	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	13,000	955	3,323	-	2,075	-	500	-	6,147	-

CONTINUED ON NEXT PAGE

TABLE C-11. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	FOREIGN
DEPARTMENT OF LABOR, TOTAL............	14,542	7,739	860	-	2,290	-	2,455	22	1,176	-
BUREAU OF LABOR STATISTICS............	3,060	3,060	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	1,708	-	-	159	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	856	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...............	8,403	1,849	840	-	2,101	-	2,437	-	1,176	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	150	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY...............	206	116	20	-	30	-	18	22	-	-
DEPARTMENT OF STATE, TOTAL............	25,363	3,813	64	-	15,934	-	1,771	63	289	3,429
DEPARTMENTAL FUNDS....................	550	109	64	-	-	-	25	63	289	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	24,813	3,704	-	-	15,934	-	1,746	-	-	3,429
DEPARTMENT OF TRANSPORTATION, TOTAL....	154,495	60,592	57,164	-	10,602	93	3,057	3,021	19,966	-
FEDERAL AVIATION ADMINISTRATION........	46,112	20,750	24,470	-	892	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	24,485	3,904	3,899	-	650	61	487	61	15,423	-
FEDERAL RAILROAD ADMINISTRATION........	20,740	11,620	7,691	-	600	-	-	829	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	29,191	12,260	8,679	-	5,000	-	1,792	584	876	-
OFFICE OF THE SECRETARY...............	15,310	4,512	10,316	-	450	32	-	-	-	-
UNITED STATES COAST GUARD.............	7,199	4,452	1,683	-	400	-	664	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	11,458	3,094	426	-	2,610	-	114	1,547	3,667	-
DEPARTMENT OF THE TREASURY, TOTAL......	542	542	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	542	542	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION................................	10	1	9	-	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	581	581	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION........	2,974	-	-	-	100	-	-	-	2,874	-
ATOMIC ENERGY COMMISSION...............	427,191	4,694	3,111	68,525	84,789	248,722	4,698	12,062	58	532
CIVIL AERONAUTICS BOARD...............	294	294	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION...............	418	418	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	66,846	22,384	16,638	-	20,000	-	1,283	230	2,846	3,465
FEDERAL COMMUNICATIONS COMMISSION......	774	574	200	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD...........	503	503	-	-	-	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	580	580	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION........	439	98	20	-	-	-	121	-	200	-
LIBRARY OF CONGRESS....................	1,188	1,188	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,577,225	548,679	779,191	545	112,369	119,490	15,916	138	-	897
NATIONAL SCIENCE FOUNDATION............	424,110	16,944	1,500	2,865	352,958	36,535	3,990	5,547	2,500	1,271
OFFICE OF ECONOMIC OPPORTUNITY.........	67,301	2,601	10,600	-	9,895	-	44,205	-	-	-
OFFICE OF EMERGENCY PREPAREDNESS.......	515	255	175	-	-	-	85	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,024	1,024	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY....	810	100	-	-	-	-	710	-	-	-
POSTAL SERVICE.........................	8,521	2,000	5,570	-	90	-	600	261	-	-
SMITHSONIAN INSTITUTION................	18,751	16,529	-	25	2,076	-	61	-	60	-
TENNESSEE VALLEY AUTHORITY.............	9,049	8,951	-	-	98	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,362	632	445	-	50	-	235	-	-	-
UNITED STATES INFORMATION AGENCY.......	162	119	43	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	67,103	65,856	215	-	621	-	226	-	185	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-12. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	
TOTAL, ALL AGENCIES......................	7,296,891	2,273,021	1,913,866	80,484	1,953,144	467,074	320,256	67,734	145,604	75,708
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	346,026	236,458	1,894	-	89,997	-	375	-	476	16,826
AGRICULTURAL RESEARCH SERVICE...........	189,131	168,177	229	-	3,560	-	339	-	-	16,826
COOPERATIVE STATE RESEARCH SERVICE.....	87,273	2,499	-	-	84,408	-	-	-	366	-
ECONOMIC RESEARCH SERVICE...............	16,836	16,236	-	-	500	-	-	-	100	-
FARMER COOPERATIVE SERVICE..............	1,034	1,034	-	-	-	-	-	-	-	-
FOREST SERVICE..........................	50,971	48,051	1,525	-	1,374	-	11	-	10	-
NATIONAL AGRICULTURAL LIBRARY...........	261	161	-	-	75	-	25	-	-	-
STATISTICAL REPORTING SERVICE...........	520	300	140	-	80	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL...........	187,783	104,901	33,892	-	38,848	-	1,645	-	7,361	1,136
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,354	641	100	-	433	-	180	-	-	-
MARITIME ADMINISTRATION.................	25,074	3,197	21,127	-	700	-	-	-	-	50
NATIONAL BUREAU OF STANDARDS............	51,553	34,861	10,176	-	4,867	-	-	-	974	675
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	103,286	59,778	2,489	-	32,786	-	1,435	-	6,387	411
OFFICE OF TELECOMMUNICATIONS............	4,950	4,950	-	-	-	-	-	-	-	-
PATENT OFFICE...........................	121	121	-	-	-	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	1,445	1,353	-	-	62	-	30	-	-	-
DEPARTMENT OF DEFENSE, TOTAL............	1,792,570	677,152	805,190	3,920	205,108	34,046	36,750	26,666	140	3,598
DEPARTMENT OF THE ARMY..................	336,749	233,005	58,992	-	28,032	467	10,357	4,725	140	1,031
DEPARTMENT OF THE NAVY..................	327,518	181,060	62,309	-	62,328	15,489	6,190	-	-	142
DEPARTMENT OF THE AIR FORCE.............	727,230	164,595	485,315	-	62,335	285	13,200	-	-	1,500
DEFENSE AGENCIES........................	397,573	97,967	197,399	3,815	51,993	17,770	6,128	21,576	-	925
DEPARTMENTWIDE FUNDS....................	3,500	525	1,175	105	420	35	875	365	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,645,842	332,697	48,507	-	894,578	5,479	231,597	16,519	75,916	40,549
FOOD AND DRUG ADMINISTRATION............	56,476	28,949	3,996	-	12,873	-	3,930	-	1,202	5,526
HEALTH SERVICES & MENTAL HEALTH ADMIN..	206,607	69,869	367	-	77,908	-	27,653	-	18,487	12,323
NATIONAL INSTITUTE OF EDUCATION.........	73,381	14,394	-	-	15,750	5,187	5,225	14,875	17,950	-
NATIONAL INSTITUTES OF HEALTH...........	1,221,900	206,034	42,927	-	752,341	292	176,430	1,644	28,032	14,200
OFFICE OF CHILD DEVELOPMENT.............	11,000	330	1,100	-	4,950	-	3,300	-	1,320	-
OFFICE OF EDUCATION.....................	22,368	649	117	-	13,142	-	5,127	-	3,333	-
SOCIAL AND REHABILITATION SERVICE......	41,472	109	-	-	17,414	-	9,882	-	5,567	8,500
SOCIAL SECURITY ADMINISTRATION.........	12,638	12,363	-	-	200	-	50	-	25	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	25,160	6,793	12,603	-	732	-	3,774	-	1,258	-
DEPARTMENT OF THE INTERIOR, TOTAL......	168,636	113,320	14,035	300	28,123	-	2,098	-	10,535	225
BONNEVILLE POWER ADMINISTRATION.........	647	167	415	-	65	-	-	-	-	-
BUREAU OF LAND MANAGEMENT...............	801	461	-	-	300	-	-	-	40	-
BUREAU OF MINES.........................	39,615	34,115	2,500	-	2,700	-	300	-	-	-
BUREAU OF OUTDOOR RECREATION............	82	82	-	-	-	-	-	-	-	-
BUREAU OF RECLAMATION...................	8,925	3,830	1,075	-	3,470	-	-	-	550	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	22,873	12,611	-	-	477	-	175	-	9,610	-
GEOLOGICAL SURVEY.......................	65,739	59,767	774	-	5,133	-	-	-	65	-
NATIONAL PARK SERVICE...................	1,532	549	-	-	983	-	-	-	-	-
OFFICE OF COAL RESEARCH.................	8,505	283	4,294	-	2,855	-	1,073	-	-	-
OFFICE OF SALINE WATER..................	6,160	510	3,350	300	1,600	-	400	-	-	-
OFFICE OF THE SECRETARY.................	425	13	147	-	40	-	-	-	-	225
OFFICE OF WATER RESOURCES RESEARCH.....	13,332	932	1,480	-	10,500	-	150	-	270	-
DEPARTMENT OF JUSTICE, TOTAL............	16,984	1,513	4,915	-	3,022	-	934	-	6,600	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	63	665	-	322	-	434	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	15,500	1,450	4,250	-	2,700	-	500	-	6,600	-

CONTINUED ON NEXT PAGE

TABLE C-12. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	FOREIGN
DEPARTMENT OF LABOR, TOTAL	15,837	8,498	859	-	2,629	-	2,653	22	1,176	-
BUREAU OF LABOR STATISTICS	2,897	2,897	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION	1,874	1,874	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN	1,164	1,164	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION	8,396	1,847	839	-	2,099	-	2,435	-	1,176	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN	300	300	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	1,206	416	20	-	530	-	218	22	-	-
DEPARTMENT OF STATE, TOTAL	35,825	8,266	60	-	22,062	-	684	60	496	4,197
DEPARTMENTAL FUNDS	750	109	60	-	-	-	25	60	496	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	35,075	8,157	-	-	22,062	-	659	-	-	4,197
DEPARTMENT OF TRANSPORTATION, TOTAL	189,602	70,785	61,760	1,934	19,325	145	1,883	3,148	30,622	-
FEDERAL AVIATION ADMINISTRATION	30,662	13,798	16,114	-	750	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION	37,686	6,009	6,064	-	650	94	750	94	24,025	-
FEDERAL RAILROAD ADMINISTRATION	36,463	20,793	13,412	1,458	800	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN	36,998	15,539	11,239	-	8,000	-	370	740	1,110	-
OFFICE OF THE SECRETARY	24,225	6,044	12,154	476	5,500	51	-	-	-	-
UNITED STATES COAST GUARD	6,424	3,973	1,359	-	500	-	592	-	-	-
URBAN MASS TRANSPORTATION ADMIN	17,144	4,629	1,418	-	3,125	-	171	2,314	5,487	-
DEPARTMENT OF THE TREASURY, TOTAL	454	454	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING	454	454	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION	75	20	30	-	25	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	567	567	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION	3,000	-	-	-	100	-	-	-	2,900	-
ATOMIC ENERGY COMMISSION	454,085	6,205	2,739	69,770	85,529	271,153	4,406	13,615	58	610
CIVIL AERONAUTICS BOARD	297	297	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION	442	442	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	76,101	23,688	25,834	-	19,000	-	1,279	230	3,400	2,670
FEDERAL COMMUNICATIONS COMMISSION	803	603	200	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD	582	407	-	-	175	-	-	-	-	-
FEDERAL TRADE COMMISSION	633	633	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION	527	90	45	-	-	-	17	-	375	-
LIBRARY OF CONGRESS	1,217	1,217	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	1,646,128	548,429	840,919	535	116,896	118,006	20,308	138	-	897
NATIONAL SCIENCE FOUNDATION	496,650	16,600	4,710	4,000	415,350	38,245	1,579	7,086	4,080	5,000
OFFICE OF ECONOMIC OPPORTUNITY	67,893	4,293	48,390	-	7,410	-	7,800	-	-	-
OFFICE OF EMERGENCY PREPAREDNESS	515	255	175	-	-	-	85	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY	1,045	1,045	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY	1,300	100	-	-	-	-	1,200	-	-	-
POSTAL SERVICE	10,246	3,457	6,129	-	110	-	300	250	-	-
SMITHSONIAN INSTITUTION	23,982	20,595	-	25	3,124	-	178	-	60	-
TENNESSEE VALLEY AUTHORITY	10,146	9,995	-	-	151	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY	1,745	580	775	-	75	-	315	-	-	-
UNITED STATES INFORMATION AGENCY	100	100	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION	74,093	72,566	205	-	775	-	396	-	151	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-13. FEDERAL OBLIGATIONS FOR RESEARCH, BY DETAILED FIELD OF SCIENCE, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

FIELD OF SCIENCE	ACTUAL, 1971	ESTIMATES	
		1972	1973
TOTAL, ALL FIELDS	6,150,207	6,749,448	7,296,891
LIFE SCIENCES, TOTAL	1,673,323	1,967,555	2,125,960
BIOLOGICAL	845,486	1,004,631	1,088,239
CLINICAL MEDICAL	513,614	582,274	628,513
OTHER MEDICAL SCIENCES	233,468	297,156	328,122
LIFE SCIENCES, NEC	80,755	83,494	81,086
PSYCHOLOGY, TOTAL	115,667	140,494	144,606
BIOLOGICAL ASPECTS	39,936	49,714	65,877
SOCIAL ASPECTS	64,746	78,145	63,824
PSYCHOLOGICAL SCIENCES, NEC	10,985	12,635	14,905
PHYSICAL SCIENCES, TOTAL	1,042,640	1,116,091	1,230,918
ASTRONOMY	220,710	206,281	240,850
CHEMISTRY	239,997	297,504	320,353
PHYSICS	542,295	571,397	631,662
PHYSICAL SCIENCES, NEC	39,638	40,909	38,053
ENVIRONMENTAL SCIENCES, TOTAL	677,463	764,289	804,623
ATMOSPHERIC SCIENCES	352,166	382,864	398,376
GEOLOGICAL SCIENCES	207,819	246,724	257,222
OCEANOGRAPHY (EXCLUDING BIOLOGICAL)	96,164	107,006	119,405
ENVIRONMENTAL SCIENCE, NEC	21,314	27,695	29,620
MATHEMATICS	121,739	138,746	142,166
ENGINEERING, TOTAL	2,111,161	2,163,222	2,258,121
AERONAUTICAL	566,602	539,384	665,448
ASTRONAUTICAL	276,093	281,614	263,052
CHEMICAL	127,923	127,456	128,308
CIVIL	85,245	116,066	141,675
ELECTRICAL	380,357	370,514	278,244
MECHANICAL	160,199	162,458	150,961
METALLURGY & MATERIALS	182,448	201,642	227,275
ENGINEERING, NEC	332,294	364,088	403,158
SOCIAL SCIENCES, TOTAL	305,650	330,495	403,045
ANTHROPOLOGY	11,660	12,803	15,596
ECONOMICS	74,511	85,516	90,341
HISTORY	4,178	5,492	6,195
LINGUISTICS	3,079	3,243	4,025
POLITICAL SCIENCE	5,103	5,553	8,209
SOCIOLOGY	104,650	117,862	126,800
SOCIAL SCIENCES, NEC	102,469	100,026	151,879
OTHER SCIENCES, NEC	102,564	128,556	187,452

TABLE C-14. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	6,150,207	1,673,323	115,667	1,042,640	677,463	121,739	2,111,161	305,650	102,564
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	292,152	180,092	31	38,665	5,428	718	30,011	36,816	391
AGRICULTURAL RESEARCH SERVICE..........	161,846	105,486	31	31,943	1,099	342	21,118	1,827	-
COOPERATIVE STATE RESEARCH SERVICE.....	67,762	46,562	-	3,389	423	-	2,322	15,066	-
ECONOMIC RESEARCH SERVICE..............	15,534	-	-	-	-	-	-	15,534	-
FARMER COOPERATIVE SERVICE.............	1,017	-	-	-	-	-	-	1,017	-
FOREST SERVICE.........................	45,111	28,044	-	3,333	3,906	156	6,571	3,101	-
NATIONAL AGRICULTURAL LIBRARY..........	391	-	-	-	-	-	-	-	391
STATISTICAL REPORTING SERVICE..........	491	-	-	-	-	220	-	271	-
DEPARTMENT OF COMMERCE, TOTAL..........	113,674	29,929	1,291	19,179	28,159	901	26,145	4,836	3,234
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	-	-	-	-	-	-	1,726	-
MARITIME ADMINISTRATION................	13,205	-	-	-	-	-	12,596	609	-
NATIONAL BUREAU OF STANDARDS...........	28,655	-	-	17,473	-	591	9,876	-	715
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	65,561	29,929	656	1,706	28,159	-	3,673	1,438	-
OFFICE OF TELECOMMUNICATIONS...........	2,107	-	-	-	-	-	-	-	2,107
PATENT OFFICE..........................	412	-	-	-	-	-	-	-	412
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,008	-	635	-	-	310	-	1,063	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,612,955	104,781	31,702	210,326	142,061	66,032	1,009,820	5,474	42,759
DEPARTMENT OF THE ARMY.................	339,126	58,501	9,381	72,603	16,132	5,785	164,918	3,601	8,205
DEPARTMENT OF THE NAVY.................	273,150	15,607	5,820	59,994	48,014	27,368	115,922	-	425
DEPARTMENT OF THE AIR FORCE............	677,186	25,479	11,284	26,234	30,485	6,578	577,126	-	-
DEFENSE AGENCIES.......................	320,466	4,883	4,925	51,056	47,430	25,962	151,020	1,407	33,783
DEPARTMENTWIDE FUNDS...................	3,027	311	292	439	-	339	834	466	346
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,302,330	1,008,307	61,505	34,471	984	15,726	21,500	123,084	36,753
FOOD AND DRUG ADMINISTRATION...........	25,643	20,567	-	5,076	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	179,157	105,374	40,146	1,013	-	1,484	31	30,875	234
NATIONAL INSTITUTES OF HEALTH..........	983,900	866,906	10,155	28,382	984	14,242	21,141	5,571	36,519
OFFICE OF CHILD DEVELOPMENT............	7,852	1,000	1,000	-	-	-	-	5,852	-
OFFICE OF EDUCATION....................	62,773	-	7,684	-	-	-	-	55,089	-
SOCIAL AND REHABILITATION SERVICE......	32,072	14,460	2,520	-	-	-	328	14,764	-
SOCIAL SECURITY ADMINISTRATION.........	10,933	-	-	-	-	-	-	10,933	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	10,496	-	-	-	210	-	9,236	1,050	-
DEPARTMENT OF THE INTERIOR, TOTAL......	139,071	24,217	66	15,564	47,710	2,194	46,391	2,706	223
BONNEVILLE POWER ADMINISTRATION........	341	-	-	27	46	20	248	-	-
BUREAU OF LAND MANAGEMENT..............	755	698	-	-	-	-	-	57	-
BUREAU OF MINES........................	38,739	-	-	7,455	2,582	763	27,939	-	-
BUREAU OF OUTDOOR RECREATION...........	185	-	-	-	-	-	-	185	-
BUREAU OF RECLAMATION..................	9,137	24	-	-	6,574	-	2,474	65	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	20,994	20,994	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	44,146	-	-	5,576	36,009	1,036	1,525	-	-
NATIONAL PARK SERVICE..................	1,141	187	-	-	-	-	-	954	-
OFFICE OF COAL RESEARCH................	4,955	-	-	-	-	-	4,955	-	-
OFFICE OF SALINE WATER.................	6,110	-	-	2,041	-	-	4,069	-	-
OFFICE OF THE SECRETARY................	153	-	-	-	-	-	153	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	12,415	2,314	66	465	2,499	375	5,028	1,445	223
DEPARTMENT OF JUSTICE, TOTAL...........	6,525	1,081	1,289	885	-	230	677	2,359	4
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,495	581	429	-	-	-	272	209	4
LAW ENFORCEMENT ASSISTANCE ADMIN.......	5,030	500	860	885	-	230	405	2,150	-
DEPARTMENT OF LABOR, TOTAL.............	13,622	-	-	-	-	-	-	13,622	-
BUREAU OF LABOR STATISTICS.............	2,853	-	-	-	-	-	-	2,853	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	-	-	-	-	-	-	1,501	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	-	-	-	-	-	-	547	-
MANPOWER ADMINISTRATION................	8,233	-	-	-	-	-	-	8,233	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	-	-	-	-	-	-	326	-
OFFICE OF THE SECRETARY................	162	-	-	-	-	-	-	162	-

CONTINUED ON NEXT PAGE

TABLE C-14. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1971

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
DEPARTMENT OF STATE, TOTAL.............	28,975	19,087	-	-	1,579	-	1,560	6,749	-
DEPARTMENTAL FUNDS.....................	350	-	-	-	-	-	-	350	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	28,625	19,087	-	-	1,579	-	1,560	6,399	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	173,179	1,169	3,359	2,208	3,893	2,072	152,755	7,652	71
FEDERAL AVIATION ADMINISTRATION........	93,492	279	-	980	1,027	1,869	87,001	2,336	-
FEDERAL HIGHWAY ADMINISTRATION.........	23,868	118	475	319	1,685	118	20,109	973	71
FEDERAL RAILROAD ADMINISTRATION........	17,950	-	96	76	-	-	17,635	143	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	14,702	301	2,113	-	-	-	12,003	285	-
OFFICE OF THE SECRETARY................	8,693	-	45	363	178	85	7,638	384	-
UNITED STATES COAST GUARD..............	4,749	471	47	470	419	-	3,342	-	-
URBAN MASS TRANSPORTATION ADMIN........	9,725	-	583	-	584	-	5,027	3,531	-
DEPARTMENT OF THE TREASURY, TOTAL......	383	-	-	365	-	-	18	-	-
BUREAU OF ENGRAVING AND PRINTING.......	383	-	-	365	-	-	18	-	-
OTHER AGENCIES									
ACTION.................................	103	-	103	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	-	-	-	-	-	-	544	-
APPALACHIAN REGIONAL COMMISSION........	2,980	-	-	-	-	-	-	2,980	-
ATOMIC ENERGY COMMISSION...............	428,991	79,534	-	294,874	10,116	5,309	39,158	-	-
CIVIL AERONAUTICS BOARD................	277	-	-	-	-	-	-	277	-
CIVIL SERVICE COMMISSION...............	369	-	369	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	53,818	17,222	45	8,610	5,350	460	21,329	802	-
FEDERAL COMMUNICATIONS COMMISSION......	616	-	-	-	-	-	616	-	-
FEDERAL HOME LOAN BANK BOARD...........	395	-	-	-	-	-	-	395	-
FEDERAL TRADE COMMISSION...............	440	-	-	-	-	-	-	440	-
GENERAL SERVICES ADMINISTRATION........	93	-	-	-	-	-	41	-	52
LIBRARY OF CONGRESS....................	982	-	-	-	-	-	-	-	982
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,496,950	90,268	1,831	333,633	352,412	1,500	709,810	-	7,496
NATIONAL SCIENCE FOUNDATION............	318,286	59,268	9,483	79,796	77,883	26,467	35,528	26,453	3,408
OFFICE OF ECONOMIC OPPORTUNITY.........	63,112	-	-	-	-	-	-	63,112	-
OFFICE OF EMERGENCY PREPAREDNESS.......	577	-	-	-	-	-	-	-	577
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,015	310	11	260	90	19	305	20	-
OFFICE OF TELECOMMUNICATIONS POLICY....	177	-	-	-	-	-	177	-	-
POSTAL SERVICE.........................	1,012	-	-	-	-	-	-	-	1,012
SMITHSONIAN INSTITUTION................	15,082	5,441	-	2,697	1,476	-	-	5,468	-
TENNESSEE VALLEY AUTHORITY.............	7,455	2,239	-	1,107	-	-	3,877	232	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,354	-	-	-	112	111	785	346	-
UNITED STATES INFORMATION AGENCY.......	108	-	-	-	-	-	108	-	-
VETERANS ADMINISTRATION................	62,109	50,378	4,582	-	-	-	1,314	233	5,602

TABLE C-15. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	6,749,448	1,967,555	140,494	1,116,091	764,289	138,746	2,163,222	330,495	128,556
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	334,567	211,520	33	42,192	6,119	749	32,322	41,383	249
AGRICULTURAL RESEARCH SERVICE..........	185,750	124,403	33	34,451	1,401	354	22,343	2,765	-
COOPERATIVE STATE RESEARCH SERVICE.....	82,272	56,581	-	4,113	467	-	2,819	18,292	-
ECONOMIC RESEARCH SERVICE..............	15,638	-	-	-	-	-	-	15,638	-
FARMER COOPERATIVE SERVICE.............	1,034	-	-	-	-	-	-	1,034	-
FOREST SERVICE.........................	49,123	30,536	-	3,628	4,251	170	7,160	3,378	-
NATIONAL AGRICULTURAL LIBRARY..........	249	-	-	-	-	-	-	-	249
STATISTICAL REPORTING SERVICE..........	501	-	-	-	-	225	-	276	-
DEPARTMENT OF COMMERCE, TOTAL..........	143,944	37,968	1,368	20,513	35,725	931	35,914	6,673	4,852
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	-	-	-	-	-	-	1,284	-
MARITIME ADMINISTRATION................	22,895	-	-	-	-	-	20,133	2,762	-
NATIONAL BUREAU OF STANDARDS...........	30,881	-	-	18,349	-	622	11,122	-	788
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	83,172	37,968	832	2,164	35,725	-	4,659	1,824	-
OFFICE OF TELECOMMUNICATIONS...........	3,774	-	-	-	-	-	-	-	3,774
PATENT OFFICE..........................	290	-	-	-	-	-	-	-	290
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,648	-	536	-	-	309	-	803	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,693,428	109,156	39,674	229,028	152,859	71,748	1,037,806	6,330	46,827
DEPARTMENT OF THE ARMY.................	316,025	55,830	12,854	57,027	16,169	7,008	154,073	5,529	7,535
DEPARTMENT OF THE NAVY.................	311,764	19,038	7,671	71,030	52,150	27,929	133,946	-	-
DEPARTMENT OF THE AIR FORCE............	695,022	29,296	12,807	20,843	31,723	6,489	593,864	-	-
DEFENSE AGENCIES.......................	366,917	4,413	5,987	79,556	52,817	29,965	155,029	468	38,682
DEPARTMENTWIDE FUNDS...................	3,700	579	355	572	-	357	894	333	610
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,513,995	1,184,920	70,145	42,151	1,203	19,369	26,368	113,788	56,051
FOOD AND DRUG ADMINISTRATION...........	37,762	31,325	-	6,437	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	198,659	114,295	45,765	1,116	-	2,007	-	35,200	276
NATIONAL INSTITUTES OF HEALTH..........	1,162,200	1,019,363	12,373	34,598	1,203	17,362	25,768	6,788	44,745
OFFICE OF CHILD DEVELOPMENT............	9,600	1,200	2,100	-	-	-	-	6,300	-
OFFICE OF EDUCATION....................	54,433	-	7,357	-	-	-	-	47,076	-
SOCIAL AND REHABILITATION SERVICE......	38,954	18,737	2,550	-	-	-	600	6,037	11,030
SOCIAL SECURITY ADMINISTRATION.........	12,387	-	-	-	-	-	-	12,387	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	21,846	-	-	-	2,184	-	14,200	5,462	-
DEPARTMENT OF THE INTERIOR, TOTAL......	154,511	25,201	67	18,755	54,229	2,075	51,096	2,848	240
BONNEVILLE POWER ADMINISTRATION........	580	-	-	40	-	20	520	-	-
BUREAU OF LAND MANAGEMENT..............	813	755	-	-	-	-	-	58	-
BUREAU OF MINES........................	40,577	-	-	10,500	851	520	28,706	-	-
BUREAU OF OUTDOOR RECREATION...........	85	-	-	-	-	-	-	85	-
BUREAU OF RECLAMATION..................	9,711	7	-	-	6,559	-	3,014	131	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	21,752	21,752	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	52,762	-	-	6,067	44,056	1,135	1,504	-	-
NATIONAL PARK SERVICE..................	1,208	207	-	-	-	-	-	1,001	-
OFFICE OF COAL RESEARCH................	7,500	-	-	-	-	-	7,500	-	-
OFFICE OF SALINE WATER.................	5,785	-	-	1,655	-	-	4,130	-	-
OFFICE OF THE SECRETARY................	405	-	-	-	83	-	322	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	13,333	2,480	67	493	2,680	400	5,400	1,573	240
DEPARTMENT OF JUSTICE, TOTAL...........	14,484	1,895	3,167	-	-	600	1,600	7,197	25
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	595	567	-	-	-	-	297	25
LAW ENFORCEMENT ASSISTANCE ADMIN.......	13,000	1,300	2,600	-	-	600	1,600	6,900	-
DEPARTMENT OF LABOR, TOTAL.............	14,542	-	-	-	-	-	-	14,542	-
BUREAU OF LABOR STATISTICS.............	3,060	-	-	-	-	-	-	3,060	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	-	-	-	-	-	-	1,867	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	-	-	-	-	-	-	856	-
MANPOWER ADMINISTRATION................	8,403	-	-	-	-	-	-	8,403	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	-	-	-	-	-	-	150	-
OFFICE OF THE SECRETARY................	206	-	-	-	-	-	-	206	-

CONTINUED ON NEXT PAGE

TABLE C-15. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOLOGY	PHYSICAL SCIENCES	ENVIRONMENTAL SCIENCES	MATHEMATICS	ENGINEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
DEPARTMENT OF STATE, TOTAL.............	25,363	10,032	-	-	840	-	4,387	10,104	-
DEPARTMENTAL FUNDS.....................	550	-	-	-	-	-	-	550	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	24,813	10,032	-	-	840	-	4,387	9,554	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	154,495	1,571	5,638	2,247	3,628	1,263	132,431	7,644	73
FEDERAL AVIATION ADMINISTRATION........	46,112	138	-	484	507	990	42,933	1,060	-
FEDERAL HIGHWAY ADMINISTRATION.........	24,485	123	490	327	1,484	123	20,867	998	73
FEDERAL RAILROAD ADMINISTRATION........	20,740	-	116	83	-	-	20,375	166	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	29,191	597	4,196	-	-	-	23,832	566	-
OFFICE OF THE SECRETARY................	15,310	-	78	640	314	150	13,452	676	-
UNITED STATES COAST GUARD..............	7,199	713	71	713	636	-	5,066	-	-
URBAN MASS TRANSPORTATION ADMIN........	11,458	-	687	-	687	-	5,906	4,178	-
DEPARTMENT OF THE TREASURY, TOTAL......	542	-	-	524	-	-	18	-	-
BUREAU OF ENGRAVING AND PRINTING.......	542	-	-	524	-	-	18	-	-
OTHER AGENCIES									
ACTION.................................	10	-	10	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	581	-	-	-	-	-	-	581	-
APPALACHIAN REGIONAL COMMISSION........	2,974	-	-	-	-	-	-	2,974	-
ATOMIC ENERGY COMMISSION...............	427,191	80,571	-	292,793	11,548	4,800	37,479	-	-
CIVIL AERONAUTICS BOARD................	294	-	-	-	-	-	-	294	-
CIVIL SERVICE COMMISSION...............	418	-	418	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	66,846	20,054	75	8,690	6,200	380	30,247	1,200	-
FEDERAL COMMUNICATIONS COMMISSION......	774	-	-	-	-	-	774	-	-
FEDERAL HOME LOAN BANK BOARD...........	503	-	-	-	-	-	-	503	-
FEDERAL TRADE COMMISSION...............	580	-	-	-	-	-	-	580	-
GENERAL SERVICES ADMINISTRATION........	439	-	-	-	-	-	399	-	40
LIBRARY OF CONGRESS....................	1,188	-	-	-	-	-	-	-	1,188
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,577,225	142,136	3,492	342,421	397,739	1,138	690,299	-	-
NATIONAL SCIENCE FOUNDATION............	424,110	78,743	11,445	111,873	89,959	35,564	58,951	33,652	3,923
OFFICE OF ECONOMIC OPPORTUNITY.........	67,301	-	-	-	-	-	-	67,301	-
OFFICE OF EMERGENCY PREPAREDNESS.......	515	-	-	-	-	-	-	-	515
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,024	313	12	262	91	19	307	20	-
OFFICE OF TELECOMMUNICATIONS POLICY....	810	-	-	-	-	-	810	-	-
POSTAL SERVICE.........................	8,521	-	-	-	-	-	-	-	8,521
SMITHSONIAN INSTITUTION................	18,751	6,793	-	3,459	1,845	-	-	6,654	-
TENNESSEE VALLEY AUTHORITY.............	9,049	2,254	-	1,183	-	-	5,396	216	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,362	-	-	-	120	110	836	296	-
UNITED STATES INFORMATION AGENCY.......	162	-	-	-	-	-	162	-	-
VETERANS ADMINISTRATION................	67,103	54,428	4,950	-	-	-	1,420	253	6,052

TABLE C-16. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	7,296,891	2,125,960	144,606	1,230,918	804,623	142,166	2,258,121	403,045	187,452
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	346,026	218,665	32	42,514	6,591	707	32,163	45,093	261
AGRICULTURAL RESEARCH SERVICE..........	189,131	126,960	32	34,385	1,685	344	21,746	3,979	-
COOPERATIVE STATE RESEARCH SERVICE.....	87,273	60,021	-	4,363	495	-	2,990	19,404	-
ECONOMIC RESEARCH SERVICE..............	16,836	-	-	-	-	-	-	16,836	-
FARMER COOPERATIVE SERVICE.............	1,034	-	-	-	-	-	-	1,034	-
FOREST SERVICE.........................	50,971	31,684	-	3,766	4,411	177	7,427	3,506	-
NATIONAL AGRICULTURAL LIBRARY..........	261	-	-	-	-	-	-	-	261
STATISTICAL REPORTING SERVICE..........	520	-	-	-	-	186	-	334	-
DEPARTMENT OF COMMERCE, TOTAL..........	187,783	47,140	1,460	23,251	44,374	1,014	56,550	5,023	8,971
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,354	-	-	-	-	-	-	1,354	-
MARITIME ADMINISTRATION................	25,074	-	-	-	-	-	24,374	700	-
NATIONAL BUREAU OF STANDARDS...........	51,553	-	-	20,563	-	700	26,390	-	3,900
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	103,286	47,140	1,033	2,688	44,374	-	5,786	2,265	-
OFFICE OF TELECOMMUNICATIONS...........	4,950	-	-	-	-	-	-	-	4,950
PATENT OFFICE..........................	121	-	-	-	-	-	-	-	121
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,445	-	427	-	-	314	-	704	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,792,570	120,850	41,059	231,083	159,443	74,218	1,072,704	8,631	84,582
DEPARTMENT OF THE ARMY.................	336,749	66,313	11,648	64,645	17,608	6,550	154,917	7,723	7,345
DEPARTMENT OF THE NAVY.................	327,518	20,058	8,042	74,188	55,334	31,756	138,140	-	-
DEPARTMENT OF THE AIR FORCE............	727,230	29,570	14,433	22,549	33,500	7,020	620,158	-	-
DEFENSE AGENCIES.......................	397,573	4,425	6,635	69,145	53,001	28,525	158,623	500	76,719
DEPARTMENTWIDE FUNDS...................	3,500	484	301	556	-	367	866	408	518
DEPT. OF HEALTH, EDUC. & WELFARE, TOTAL	1,645,842	1,259,611	66,418	46,382	1,300	20,889	28,492	163,584	59,166
FOOD AND DRUG ADMINISTRATION...........	56,476	48,667	-	7,809	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	206,607	120,282	47,889	1,183	-	2,125	-	34,846	282
NATIONAL INSTITUTE OF EDUCATION........	73,381	-	-	-	-	-	-	73,381	-
NATIONAL INSTITUTES OF HEALTH..........	1,221,900	1,068,113	13,371	37,390	1,300	18,764	27,892	7,336	47,734
OFFICE OF CHILD DEVELOPMENT............	11,000	1,600	2,300	-	-	-	-	7,100	-
OFFICE OF EDUCATION....................	22,368	-	150	-	-	-	-	22,218	-
SOCIAL AND REHABILITATION SERVICE......	41,472	20,949	2,708	-	-	-	600	6,065	11,150
SOCIAL SECURITY ADMINISTRATION.........	12,638	-	-	-	-	-	-	12,638	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	25,160	-	-	-	5,032	-	13,838	6,290	-
DEPARTMENT OF THE INTERIOR, TOTAL......	168,636	26,304	67	18,809	66,007	2,113	51,959	3,137	240
BONNEVILLE POWER ADMINISTRATION........	647	-	-	-	-	20	627	-	-
BUREAU OF LAND MANAGEMENT..............	801	739	-	-	-	-	-	62	-
BUREAU OF MINES........................	39,615	-	-	9,383	831	509	28,892	-	-
BUREAU OF OUTDOOR RECREATION...........	82	-	-	-	-	-	-	82	-
BUREAU OF RECLAMATION..................	8,925	5	-	-	6,200	-	2,625	95	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	22,873	22,873	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	65,739	-	-	6,828	56,142	1,184	1,585	-	-
NATIONAL PARK SERVICE..................	1,532	207	-	-	-	-	-	1,325	-
OFFICE OF COAL RESEARCH................	8,505	-	-	-	-	-	8,505	-	-
OFFICE OF SALINE WATER.................	6,160	-	-	2,105	-	-	4,055	-	-
OFFICE OF THE SECRETARY................	425	-	-	-	155	-	270	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	13,332	2,480	67	493	2,679	400	5,400	1,573	240
DEPARTMENT OF JUSTICE, TOTAL...........	16,984	2,295	3,716	-	-	700	1,900	8,348	25
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	595	616	-	-	-	-	248	25
LAW ENFORCEMENT ASSISTANCE ADMIN.......	15,500	1,700	3,100	-	-	700	1,900	8,100	-
DEPARTMENT OF LABOR, TOTAL.............	15,837	-	-	-	-	-	-	15,837	-
BUREAU OF LABOR STATISTICS.............	2,897	-	-	-	-	-	-	2,897	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	-	-	-	-	-	-	1,874	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	-	-	-	-	-	-	1,164	-
MANPOWER ADMINISTRATION................	8,396	-	-	-	-	-	-	8,396	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	-	-	-	-	-	-	300	-
OFFICE OF THE SECRETARY................	1,206	-	-	-	-	-	-	1,206	-

CONTINUED ON NEXT PAGE

TABLE C-16. FEDERAL OBLIGATIONS FOR RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOLOGY	PHYSICAL SCIENCES	ENVIRONMENTAL SCIENCES	MATHEMATICS	ENGINEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
DEPARTMENT OF STATE, TOTAL	35,825	18,798	-	-	1,638	-	1,600	13,789	-
DEPARTMENTAL FUNDS	750	-	-	-	-	-	-	750	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	35,075	18,798	-	-	1,638	-	1,600	13,039	-
DEPARTMENT OF TRANSPORTATION, TOTAL	189,602	1,670	7,488	2,620	3,716	1,037	162,354	10,605	112
FEDERAL AVIATION ADMINISTRATION	30,662	92	-	322	338	613	28,531	766	-
FEDERAL HIGHWAY ADMINISTRATION	37,686	186	749	503	1,284	186	33,131	1,535	112
FEDERAL RAILROAD ADMINISTRATION	36,463	-	204	146	-	-	35,821	292	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	36,998	756	5,319	-	-	-	30,205	718	-
OFFICE OF THE SECRETARY	24,225	-	123	1,012	497	238	21,284	1,071	-
UNITED STATES COAST GUARD	6,424	636	64	637	568	-	4,519	-	-
URBAN MASS TRANSPORTATION ADMIN.	17,144	-	1,029	-	1,029	-	8,863	6,223	-
DEPARTMENT OF THE TREASURY, TOTAL	454	-	-	436	-	-	18	-	-
BUREAU OF ENGRAVING AND PRINTING	454	-	-	436	-	-	18	-	-
OTHER AGENCIES									
ACTION	75	-	50	-	-	-	-	25	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	567	-	-	-	-	-	-	567	-
APPALACHIAN REGIONAL COMMISSION	3,000	-	-	-	-	-	-	3,000	-
ATOMIC ENERGY COMMISSION	454,085	84,151	-	317,024	10,904	4,650	37,356	-	-
CIVIL AERONAUTICS BOARD	297	-	-	-	-	-	-	297	-
CIVIL SERVICE COMMISSION	442	-	442	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	76,101	22,500	125	9,100	7,400	425	34,951	1,600	-
FEDERAL COMMUNICATIONS COMMISSION	803	-	-	-	-	-	803	-	-
FEDERAL HOME LOAN BANK BOARD	582	-	-	-	-	-	-	582	-
FEDERAL TRADE COMMISSION	633	-	-	-	-	-	-	633	-
GENERAL SERVICES ADMINISTRATION	527	-	-	-	-	-	487	-	40
LIBRARY OF CONGRESS	1,217	-	-	-	-	-	-	-	1,217
NATIONAL AERONAUTICS & SPACE ADMIN.	1,646,128	160,968	4,117	410,592	399,006	1,024	670,421	-	-
NATIONAL SCIENCE FOUNDATION	496,650	90,242	14,155	123,603	96,885	35,134	82,183	39,063	15,385
OFFICE OF ECONOMIC OPPORTUNITY	67,893	-	-	-	-	-	-	67,893	-
OFFICE OF EMERGENCY PREPAREDNESS	515	-	-	-	-	-	-	-	515
OFFICE OF SCIENCE AND TECHNOLOGY	1,045	320	12	267	93	20	313	20	-
OFFICE OF TELECOMMUNICATIONS POLICY	1,300	-	-	-	-	-	1,300	-	-
POSTAL SERVICE	10,246	-	-	-	-	-	-	-	10,246
SMITHSONIAN INSTITUTION	23,982	9,896	-	3,844	2,074	-	-	8,168	-
TENNESSEE VALLEY AUTHORITY	10,146	2,461	-	1,393	-	-	6,071	221	-
US ARMS CONTROL & DISARMAMENT AGENCY	1,745	-	-	-	160	235	990	360	-
UNITED STATES INFORMATION AGENCY	100	-	-	-	-	-	100	-	-
VETERANS ADMINISTRATION	74,093	60,089	5,465	-	-	-	1,568	279	6,692

FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHOLOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	115,667	39,936	64,746	10,985	1,042,640	220,710	239,997	542,295	39,638
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	31	-	31	-	38,665	-	31,561	7,026	78
AGRICULTURAL RESEARCH SERVICE..........	31	-	31	-	31,943	-	26,349	5,516	78
COOPERATIVE STATE RESEARCH SERVICE.....	-	-	-	-	3,389	-	3,389	-	-
FOREST SERVICE.........................	-	-	-	-	3,333	-	1,823	1,510	-
DEPARTMENT OF COMMERCE, TOTAL..........	1,291	656	635	-	19,179	755	7,150	11,150	124
NATIONAL BUREAU OF STANDARDS...........	-	-	-	-	17,473	755	5,444	11,150	124
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	656	656	-	-	1,706	-	1,706	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	635	-	635	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	31,702	6,225	23,841	1,636	210,326	6,995	45,284	118,831	39,216
DEPARTMENT OF THE ARMY.................	9,381	3,461	5,481	439	72,603	11	32,531	33,037	7,024
DEPARTMENT OF THE NAVY.................	5,820	855	4,391	574	59,994	3,107	6,152	48,036	2,699
DEPARTMENT OF THE AIR FORCE............	11,284	682	10,602	-	26,234	3,823	5,105	17,306	-
DEFENSE AGENCIES.......................	4,925	1,198	3,104	623	51,056	54	1,490	20,019	29,493
DEPARTMENTWIDE FUNDS...................	292	29	263	-	439	-	6	433	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	61,505	20,186	31,970	9,349	34,471	-	34,171	300	-
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	5,076	-	5,076	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	40,146	17,769	20,425	1,952	1,013	-	1,013	-	-
NATIONAL INSTITUTES OF HEALTH..........	10,155	2,417	406	7,332	28,382	-	28,082	300	-
OFFICE OF CHILD DEVELOPMENT............	1,000	-	1,000	-	-	-	-	-	-
OFFICE OF EDUCATION....................	7,684	-	7,619	65	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	2,520	-	2,520	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	66	-	66	-	15,564	-	13,616	1,948	-
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	27	-	-	27	-
BUREAU OF MINES........................	-	-	-	-	7,455	-	6,585	870	-
GEOLOGICAL SURVEY......................	-	-	-	-	5,576	-	4,540	1,036	-
OFFICE OF SALINE WATER.................	-	-	-	-	2,041	-	2,041	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	66	-	66	-	465	-	450	15	-
DEPARTMENT OF JUSTICE, TOTAL...........	1,289	-	1,289	-	885	-	610	275	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	429	-	429	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	860	-	860	-	885	-	610	275	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	3,359	203	3,156	-	2,208	46	448	1,714	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	980	46	-	934	-
FEDERAL HIGHWAY ADMINISTRATION.........	475	-	475	-	319	-	166	153	-
FEDERAL RAILROAD ADMINISTRATION........	96	-	96	-	76	-	-	76	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	2,113	203	1,910	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	45	-	45	-	363	-	-	363	-
UNITED STATES COAST GUARD..............	47	-	47	-	470	-	282	188	-
URBAN MASS TRANSPORTATION ADMIN........	583	-	583	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL......	-	-	-	-	365	-	95	50	220
BUREAU OF ENGRAVING AND PRINTING.......	-	-	-	-	365	-	95	50	220
OTHER AGENCIES									
ACTION.................................	103	-	103	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION...............	-	-	-	-	294,874	-	60,511	234,363	-
CIVIL SERVICE COMMISSION...............	369	-	369	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	45	45	-	-	8,610	-	6,027	2,583	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,831	1,831	-	-	333,633	186,964	16,203	130,466	-
NATIONAL SCIENCE FOUNDATION............	9,483	7,177	2,306	-	79,796	23,236	23,131	33,429	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	11	6	5	-	260	17	83	160	-
SMITHSONIAN INSTITUTION................	-	-	-	-	2,697	2,697	-	-	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	1,107	-	1,107	-	-
VETERANS ADMINISTRATION................	4,582	3,607	975	-	-	-	-	-	-

FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	140,494	49,714	78,145	12,635	1,116,091	206,281	297,504	571,397	40,909
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	33	-	33	-	42,192	-	34,495	7,518	179
AGRICULTURAL RESEARCH SERVICE..........	33	-	33	-	34,451	-	28,397	5,875	179
COOPERATIVE STATE RESEARCH SERVICE.....	-	-	-	-	4,113	-	4,113	-	-
FOREST SERVICE.........................	-	-	-	-	3,628	-	1,985	1,643	-
DEPARTMENT OF COMMERCE, TOTAL..........	1,368	832	536	-	20,513	781	8,040	11,563	129
NATIONAL BUREAU OF STANDARDS...........	-	-	-	-	18,349	781	5,876	11,563	129
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	832	832	-	-	2,164	-	2,164	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	536	-	536	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	39,674	7,328	29,545	2,801	229,028	7,124	40,089	143,568	38,247
DEPARTMENT OF THE ARMY.................	12,854	4,652	7,467	735	57,027	-	26,787	23,790	6,450
DEPARTMENT OF THE NAVY.................	7,671	566	6,445	660	71,030	3,116	7,063	57,834	3,017
DEPARTMENT OF THE AIR FORCE............	12,807	500	12,307	-	20,843	4,008	5,410	11,425	-
DEFENSE AGENCIES.......................	5,987	1,588	2,993	1,406	79,556	-	829	49,947	28,780
DEPARTMENTWIDE FUNDS...................	355	22	333	-	572	-	-	572	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	70,145	24,806	35,739	9,600	42,151	-	41,784	367	-
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	6,437	-	6,437	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	45,765	21,856	23,388	521	1,116	-	1,116	-	-
NATIONAL INSTITUTES OF HEALTH..........	12,373	2,950	494	8,929	34,598	-	34,231	367	-
OFFICE OF CHILD DEVELOPMENT............	2,100	-	2,100	-	-	-	-	-	-
OFFICE OF EDUCATION....................	7,357	-	7,207	150	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	2,550	-	2,550	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	67	-	67	-	18,755	-	14,558	4,197	-
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	40	-	-	40	-
BUREAU OF MINES........................	-	-	-	-	10,500	-	7,490	3,010	-
GEOLOGICAL SURVEY......................	-	-	-	-	6,067	-	4,932	1,135	-
OFFICE OF SALINE WATER.................	-	-	-	-	1,655	-	1,655	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	67	-	67	-	493	-	481	12	-
DEPARTMENT OF JUSTICE, TOTAL...........	3,167	200	2,967	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	567	-	567	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	2,600	200	2,400	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	5,638	403	5,235	-	2,247	23	598	1,626	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	484	23	-	461	-
FEDERAL HIGHWAY ADMINISTRATION.........	490	-	490	-	327	-	170	157	-
FEDERAL RAILROAD ADMINISTRATION........	116	-	116	-	83	-	-	83	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	4,196	403	3,793	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	78	-	78	-	640	-	-	640	-
UNITED STATES COAST GUARD..............	71	-	71	-	713	-	428	285	-
URBAN MASS TRANSPORTATION ADMIN........	687	-	687	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL......	-	-	-	-	524	-	95	75	354
BUREAU OF ENGRAVING AND PRINTING.......	-	-	-	-	524	-	95	75	354
OTHER AGENCIES									
ACTION.................................	10	-	10	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION...............	-	-	-	-	292,793	-	60,157	232,636	-
CIVIL SERVICE COMMISSION...............	418	-	418	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	75	50	25	-	8,690	-	7,400	1,290	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	3,492	3,492	-	-	342,421	169,383	53,016	120,022	-
NATIONAL SCIENCE FOUNDATION............	11,445	8,700	2,511	234	111,873	25,494	36,006	48,373	2,000
OFFICE OF SCIENCE AND TECHNOLOGY.......	12	6	6	-	262	17	83	162	-
SMITHSONIAN INSTITUTION................	-	-	-	-	3,459	3,459	-	-	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	1,183	-	1,183	-	-
VETERANS ADMINISTRATION................	4,950	3,897	1,053	-	-	-	-	-	-

TABLE C-19. FEDERAL OBLIGATIONS FOR RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	144,606	65,877	63,824	14,905	1,230,918	240,850	320,353	631,662	38,053
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	32	-	32	-	42,514	-	34,802	7,386	326
AGRICULTURAL RESEARCH SERVICE..........	32	-	32	-	34,385	-	28,380	5,679	326
COOPERATIVE STATE RESEARCH SERVICE.....	-	-	-	-	4,363	-	4,363	-	-
FOREST SERVICE.........................	-	-	-	-	3,766	-	2,059	1,707	-
DEPARTMENT OF COMMERCE, TOTAL..........	1,460	1,033	427	-	23,251	792	9,373	12,954	132
NATIONAL BUREAU OF STANDARDS...........	-	-	-	-	20,563	792	6,685	12,954	132
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,033	1,033	-	-	2,688	-	2,688	-	-
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	427	-	427	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	41,059	18,793	18,164	4,102	231,083	7,344	44,247	142,225	37,267
DEPARTMENT OF THE ARMY.................	11,648	3,658	7,255	735	64,645	11	30,339	25,006	9,289
DEPARTMENT OF THE NAVY.................	8,042	600	6,835	607	74,188	3,073	6,852	61,356	2,907
DEPARTMENT OF THE AIR FORCE............	14,433	12,913	1,520	-	22,549	4,260	5,901	12,388	-
DEFENSE AGENCIES.......................	6,635	1,600	2,275	2,760	69,145	-	1,155	42,919	25,071
DEPARTMENTWIDE FUNDS...................	301	22	279	-	556	-	-	556	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	66,418	26,164	29,606	10,648	46,382	-	45,985	397	-
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	7,809	-	7,809	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	47,889	22,975	24,064	850	1,183	-	1,183	-	-
NATIONAL INSTITUTES OF HEALTH..........	13,371	3,189	534	9,648	37,390	-	36,993	397	-
OFFICE OF CHILD DEVELOPMENT............	2,300	-	2,300	-	-	-	-	-	-
OFFICE OF EDUCATION....................	150	-	-	150	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	2,708	-	2,708	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	67	-	67	-	18,809	-	14,941	3,868	-
BUREAU OF MINES........................	-	-	-	-	9,383	-	6,711	2,672	-
GEOLOGICAL SURVEY......................	-	-	-	-	6,828	-	5,644	1,184	-
OFFICE OF SALINE WATER.................	-	-	-	-	2,105	-	2,105	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	67	-	67	-	493	-	481	12	-
DEPARTMENT OF JUSTICE, TOTAL...........	3,716	300	3,416	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	616	-	616	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	3,100	300	2,800	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	7,488	511	6,977	-	2,620	15	644	1,961	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	322	15	-	307	-
FEDERAL HIGHWAY ADMINISTRATION.........	749	-	749	-	503	-	262	241	-
FEDERAL RAILROAD ADMINISTRATION........	204	-	204	-	146	-	-	146	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	5,319	511	4,808	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	123	-	123	-	1,012	-	-	1,012	-
UNITED STATES COAST GUARD..............	64	-	64	-	637	-	382	255	-
URBAN MASS TRANSPORTATION ADMIN........	1,029	-	1,029	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL......	-	-	-	-	436	-	100	60	276
BUREAU OF ENGRAVING AND PRINTING.......	-	-	-	-	436	-	100	60	276
OTHER AGENCIES									
ACTION.................................	50	-	50	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION...............	-	-	-	-	317,024	-	61,504	255,520	-
CIVIL SERVICE COMMISSION...............	442	-	442	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	125	50	75	-	9,100	-	7,600	1,500	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	4,117	4,117	-	-	410,592	196,904	61,101	152,587	-
NATIONAL SCIENCE FOUNDATION............	14,155	10,600	3,400	155	123,603	31,934	38,578	53,039	52
OFFICE OF SCIENCE AND TECHNOLOGY.......	12	7	5	-	267	17	85	165	-
SMITHSONIAN INSTITUTION................	-	-	-	-	3,844	3,844	-	-	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	1,393	-	1,393	-	-
VETERANS ADMINISTRATION................	5,465	4,302	1,163	-	-	-	-	-	-

TABLE C-20. FEDERAL OBLIGATIONS FOR RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE,
FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES	1,673,323	845,485	513,614	233,468	80,755	677,463	352,166	207,819	96,164	21,314
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	180,092	176,891	3,066	135	-	5,428	2,006	3,422	-	-
AGRICULTURAL RESEARCH SERVICE	105,486	105,351	-	135	-	1,099	228	871	-	-
COOPERATIVE STATE RESEARCH SERVICE	46,562	43,496	3,066	-	-	423	423	-	-	-
FOREST SERVICE	28,044	28,044	-	-	-	3,906	1,355	2,551	-	-
DEPARTMENT OF COMMERCE, TOTAL	29,929	29,929	-	-	-	28,159	18,715	6,420	3,024	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	29,929	29,929	-	-	-	28,159	18,715	6,420	3,024	-
DEPARTMENT OF DEFENSE, TOTAL	104,781	35,092	45,564	23,655	470	142,061	53,836	27,628	43,165	17,432
DEPARTMENT OF THE ARMY	58,501	23,427	34,804	-	270	16,132	8,960	4,987	2,062	123
DEPARTMENT OF THE NAVY	15,607	4,970	10,637	-	-	48,014	6,416	1,376	39,288	934
DEPARTMENT OF THE AIR FORCE	25,479	1,824	-	23,655	-	30,485	28,177	2,308	-	-
DEFENSE AGENCIES	4,883	4,683	-	-	200	47,430	10,283	18,957	1,815	16,375
DEPARTMENTWIDE FUNDS	311	188	123	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,008,307	343,292	425,442	193,400	46,173	984	-	-	-	984
FOOD AND DRUG ADMINISTRATION	20,567	15,535	-	5,032	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	105,374	24,901	75,934	4,539	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	866,906	302,856	335,666	182,211	46,173	984	-	-	-	984
OFFICE OF CHILD DEVELOPMENT	1,000	-	1,000	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE	14,460	-	12,842	1,618	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP.	-	-	-	-	-	210	92	44	-	74
DEPARTMENT OF THE INTERIOR, TOTAL	24,217	24,186	-	-	31	47,710	6,688	39,914	1,070	38
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	46	-	46	-	-
BUREAU OF LAND MANAGEMENT	698	698	-	-	-	-	-	-	-	-
BUREAU OF MINES	-	-	-	-	-	2,582	-	2,563	19	-
BUREAU OF RECLAMATION	24	12	-	-	12	6,574	6,574	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE	20,994	20,994	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY	-	-	-	-	-	36,009	-	34,979	1,030	-
NATIONAL PARK SERVICE	187	187	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	-	-	-	-	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH	2,314	2,295	-	-	19	2,499	114	2,326	21	38
DEPARTMENT OF JUSTICE, TOTAL	1,081	1,081	-	-	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	581	581	-	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	500	500	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL	19,087	12,750	6,337	-	-	1,579	-	1,579	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	19,087	12,750	6,337	-	-	1,579	-	1,579	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	1,169	843	186	140	-	3,893	1,358	1,424	325	786
FEDERAL AVIATION ADMINISTRATION	279	-	186	93	-	1,027	934	-	-	93
FEDERAL HIGHWAY ADMINISTRATION	118	71	-	47	-	1,685	237	1,424	-	24
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	301	301	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	-	-	-	-	-	178	93	-	-	85
UNITED STATES COAST GUARD	471	471	-	-	-	419	94	-	325	-
URBAN MASS TRANSPORTATION ADMIN.	-	-	-	-	-	584	-	-	-	584
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION	79,534	71,309	8,225	-	-	10,116	5,812	2,085	2,219	-
ENVIRONMENTAL PROTECTION AGENCY	17,222	13,778	344	3,100	-	5,350	3,470	80	1,800	-
NATIONAL AERONAUTICS & SPACE ADMIN.	90,268	57,236	-	2,450	30,582	352,412	227,092	113,605	11,715	-
NATIONAL SCIENCE FOUNDATION	59,268	56,349	-	-	2,919	77,883	32,979	10,128	32,776	2,000
OFFICE OF SCIENCE AND TECHNOLOGY	310	189	121	-	-	90	28	43	19	-
SMITHSONIAN INSTITUTION	5,441	5,441	-	-	-	1,476	90	1,335	51	-
TENNESSEE VALLEY AUTHORITY	2,239	2,239	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY	-	-	-	-	-	112	-	112	-	-
VETERANS ADMINISTRATION	50,378	14,881	24,329	10,588	580	-	-	-	-	-

TABLE C-21. FEDERAL OBLIGATIONS FOR RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	1,957,555	1,004,631	582,274	297,156	83,494	764,289	382,864	246,724	107,006	27,695
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	211,520	207,486	3,722	312	-	6,119	2,189	3,930	-	-
AGRICULTURAL RESEARCH SERVICE..........	124,403	124,091	-	312	-	1,401	248	1,153	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	56,581	52,859	3,722	-	-	467	467	-	-	-
FOREST SERVICE.........................	30,536	30,536	-	-	-	4,251	1,474	2,777	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	37,968	37,968	-	-	-	35,725	23,748	8,147	3,830	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	37,968	37,968	-	-	-	35,725	23,748	8,147	3,830	-
DEPARTMENT OF DEFENSE, TOTAL...........	109,156	33,130	48,288	27,479	259	152,859	57,863	26,925	45,289	22,782
DEPARTMENT OF THE ARMY.................	55,830	20,888	34,684	53	205	16,169	9,487	3,921	2,686	75
DEPARTMENT OF THE NAVY.................	19,038	5,677	13,361	-	-	52,150	8,467	1,583	40,576	1,524
DEPARTMENT OF THE AIR FORCE............	29,296	1,870	-	27,426	-	31,723	29,647	2,076	-	-
DEFENSE AGENCIES.......................	4,413	4,359	-	-	54	52,817	10,262	19,345	2,027	21,183
DEPARTMENTWIDE FUNDS...................	579	336	243	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,184,920	397,943	494,531	245,261	47,185	1,203	-	-	-	1,203
FOOD AND DRUG ADMINISTRATION...........	31,325	19,767	-	11,558	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	114,295	30,000	83,267	1,028	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	1,019,363	348,176	393,492	230,510	47,185	1,203	-	-	-	1,203
OFFICE OF CHILD DEVELOPMENT............	1,200	-	1,200	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	18,737	-	16,572	2,165	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	2,184	917	502	-	765
DEPARTMENT OF THE INTERIOR, TOTAL......	25,201	25,171	-	-	30	54,229	6,687	45,471	2,033	38
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	755	755	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	851	-	851	-	-
BUREAU OF RECLAMATION..................	7	2	-	-	5	6,559	6,559	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	21,752	21,752	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	44,056	-	42,073	1,983	-
NATIONAL PARK SERVICE..................	207	207	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	83	-	58	25	-
OFFICE OF WATER RESOURCES RESEARCH.....	2,480	2,455	-	-	25	2,680	128	2,489	25	38
DEPARTMENT OF JUSTICE, TOTAL...........	1,895	1,757	100	38	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	595	557	-	38	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,300	1,200	100	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	10,032	9,458	574	-	-	840	-	840	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	10,032	9,458	574	-	-	840	-	840	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	1,571	1,383	92	96	-	3,628	1,011	1,217	493	907
FEDERAL AVIATION ADMINISTRATION........	138	-	92	46	-	507	461	-	-	46
FEDERAL HIGHWAY ADMINISTRATION.........	123	73	-	50	-	1,484	243	1,217	-	24
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	597	597	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	314	164	-	-	150
UNITED STATES COAST GUARD..............	713	713	-	-	-	636	143	-	493	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	687	-	-	-	687
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	80,571	72,561	8,010	-	-	11,548	6,550	1,970	3,028	-
ENVIRONMENTAL PROTECTION AGENCY........	20,054	15,304	550	4,200	-	6,200	3,850	250	2,100	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	142,136	102,900	-	8,331	30,905	397,739	241,743	142,951	13,045	-
NATIONAL SCIENCE FOUNDATION............	78,743	74,255	-	-	4,488	89,959	38,188	12,663	37,108	2,000
OFFICE OF SCIENCE AND TECHNOLOGY.......	313	191	122	-	-	91	28	43	20	-
SMITHSONIAN INSTITUTION................	6,793	6,793	-	-	-	1,845	90	1,695	60	-
TENNESSEE VALLEY AUTHORITY.............	2,254	2,254	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	120	-	120	-	-
VETERANS ADMINISTRATION................	54,428	16,077	26,285	11,439	627	-	-	-	-	-

TABLE C-22. FEDERAL OBLIGATIONS FOR RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	2,125,960	1,088,239	628,513	328,122	81,086	804,623	398,376	257,222	119,405	29,620
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	218,6[illegible]	214,148	3,948	569	-	6,591	2,264	4,327	-	-
AGRICULTURAL RESEARCH SERVICE..........	126,9[illegible]	126,391	-	569	-	1,685	239	1,446	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	60,021	56,073	3,948	-	-	495	495	-	-	-
FOREST SERVICE.........................	31,684	31,684	-	-	-	4,411	1,530	2,881	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	47,140	47,140	-	-	-	44,374	29,566	10,127	4,681	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	47,140	47,140	-	-	-	44,374	29,566	10,127	4,681	-
DEPARTMENT OF DEFENSE, TOTAL...........	120,850	29,593	63,287	27,570	400	159,443	60,898	25,257	48,404	24,884
DEPARTMENT OF THE ARMY.................	66,313	17,262	48,751	-	300	17,608	10,706	4,047	2,455	400
DEPARTMENT OF THE NAVY.................	20,058	5,745	14,313	-	-	55,334	8,506	1,545	43,839	1,444
DEPARTMENT OF THE AIR FORCE............	29,570	2,000	-	27,570	-	33,500	31,040	2,460	-	-
DEFENSE AGENCIES.......................	4,425	4,325	-	-	100	53,001	10,646	17,205	2,110	23,040
DEPARTMENTWIDE FUNDS...................	484	261	223	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,259,611	422,996	517,567	272,451	46,597	1,300	-	-	-	1,300
FOOD AND DRUG ADMINISTRATION...........	48,667	32,122	-	16,545	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	120,282	32,345	86,812	1,125	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	1,068,113	358,529	410,371	252,616	46,597	1,300	-	-	-	1,300
OFFICE OF CHILD DEVELOPMENT............	1,600	-	1,600	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	20,949	-	18,784	2,165	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	5,032	-	2,969	-	2,063
DEPARTMENT OF THE INTERIOR, TOTAL......	26,304	26,274	-	-	30	66,007	6,328	55,988	3,653	38
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	739	739	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	831	-	831	-	-
BUREAU OF RECLAMATION..................	5	-	-	-	5	6,200	6,200	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	22,873	22,873	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	56,142	-	52,544	3,598	-
NATIONAL PARK SERVICE..................	207	207	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	155	-	125	30	-
OFFICE OF WATER RESOURCES RESEARCH.....	2,480	2,455	-	-	25	2,679	128	2,488	25	38
DEPARTMENT OF JUSTICE, TOTAL...........	2,295	2,057	200	38	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	595	557	-	38	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,700	1,500	200	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	18,798	13,492	5,306	-	-	1,638	-	1,638	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	18,798	13,492	5,306	-	-	1,638	-	1,638	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	1,670	1,504	61	105	-	3,716	1,067	873	441	1,335
FEDERAL AVIATION ADMINISTRATION........	92	-	61	31	-	338	307	-	-	31
FEDERAL HIGHWAY ADMINISTRATION.........	186	112	-	74	-	1,284	374	873	-	37
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	756	756	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	497	259	-	-	238
UNITED STATES COAST GUARD..............	636	636	-	-	-	568	127	-	441	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	1,029	-	-	-	1,029
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	84,151	75,901	8,250	-	-	10,904	5,890	2,055	2,959	-
ENVIRONMENTAL PROTECTION AGENCY........	22,500	17,050	750	4,700	-	7,400	4,350	350	2,700	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	160,968	122,578	-	10,060	28,330	399,006	247,888	137,805	13,313	-
NATIONAL SCIENCE FOUNDATION............	90,242	85,205	-	-	5,037	96,885	40,005	13,710	43,170	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	320	195	125	-	-	93	30	43	20	-
SMITHSONIAN INSTITUTION................	9,896	9,896	-	-	-	2,074	90	1,920	64	-
TENNESSEE VALLEY AUTHORITY.............	2,461	2,461	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	160	-	160	-	-
VETERANS ADMINISTRATION................	60,089	17,749	29,019	12,629	692	-	-	-	-	-

TABLE C-23. FEDERAL OBLIGATIONS FOR RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	2,111,161	566,602	276,093	127,923	85,245	380,357	160,199	182,448	332,294
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	30,011	-	-	3,903	3,580	58	1,635	-	20,835
AGRICULTURAL RESEARCH SERVICE..........	21,118	-	-	3,453	2,678	58	890	-	14,039
COOPERATIVE STATE RESEARCH SERVICE.....	2,322	-	-	-	-	-	-	-	2,322
FOREST SERVICE.........................	6,571	-	-	450	902	-	745	-	4,474
DEPARTMENT OF COMMERCE, TOTAL..........	26,145	-	-	1,185	11,808	4,017	1,615	1,915	5,605
MARITIME ADMINISTRATION................	12,596	-	-	-	10,913	820		-	863
NATIONAL BUREAU OF STANDARDS...........	9,876	-	-	-	895	1,633	691	1,915	4,742
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	3,673	-	-	1,185	-	1,564	924	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,009,820	218,815	88,092	42,492	19,313	259,161	66,818	94,705	220,424
DEPARTMENT OF THE ARMY.................	164,918	29,079	-	20,805	9,019	56,012	13,781	20,007	16,215
DEPARTMENT OF THE NAVY.................	115,922	12,994	1,007	13,010	4,314	35,577	22,647	20,474	5,899
DEPARTMENT OF THE AIR FORCE............	577,126	171,345	84,197	7,017	3,246	125,080	26,845	38,091	121,305
DEFENSE AGENCIES.......................	151,020	5,397	2,888	1,660	2,257	42,424	3,447	16,133	76,814
DEPARTMENTWIDE FUNDS...................	834	-	-	-	477	68	98	-	191
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	21,500	-	-	-	31	-	-	-	21,469
HEALTH SERVICES & MENTAL HEALTH ADMIN..	31	-	-	-	31	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	21,141	-	-	-	-	-	-	-	21,141
SOCIAL AND REHABILITATION SERVICE......	328	-	-	-	-	-	-	-	328
DEPARTMENT OF HOUSING & URBAN DEVELOP..	9,236	-	-	-	5,080	262	200	-	3,694
DEPARTMENT OF THE INTERIOR, TOTAL......	46,391	-	-	14,820	6,185	3,537	2,364	17,208	1,777
BONNEVILLE POWER ADMINISTRATION........	248	-	-	-	-	248	-	-	-
BUREAU OF MINES........................	27,939	-	-	8,230	25	1,349	1,146	17,189	-
BUREAU OF RECLAMATION..................	2,474	-	-	-	2,239	235	-	-	-
GEOLOGICAL SURVEY......................	1,525	-	-	-	1,288	-	237	-	-
OFFICE OF COAL RESEARCH................	4,955	-	-	2,185	-	1,465	1,260	-	45
OFFICE OF SALINE WATER.................	4,069	-	-	4,069	-	-	-	-	-
OFFICE OF THE SECRETARY................	153	-	-	-	-	153	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	5,028	-	-	336	2,633	87	221	19	1,732
DEPARTMENT OF JUSTICE, TOTAL...........	677	-	-	-	-	405	272	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	272	-	-	-	-	-	272	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	405	-	-	-	-	405	-	-	-
DEPARTMENT OF STATE, TOTAL.............	1,560	-	-	-	1,242	-	318	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,560	-	-	-	1,242	-	318	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	152,755	57,180	244	1,836	23,618	35,035	27,375	3,141	4,326
FEDERAL AVIATION ADMINISTRATION........	87,001	55,127	93	-	2,804	28,949	28	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	20,109	71	47	190	14,830	480	2,592	712	1,187
FEDERAL RAILROAD ADMINISTRATION........	17,635	84	-	234	-	569	14,438	-	2,310
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	12,003	-	-	479	-	1,340	8,857	984	343
OFFICE OF THE SECRETARY................	7,638	1,879	85	-	2,477	2,172	512	171	342
UNITED STATES COAST GUARD..............	3,342	19	19	894	659	941	753	10	47
URBAN MASS TRANSPORTATION ADMIN........	5,027	-	-	39	2,848	584	195	1,264	97
DEPARTMENT OF THE TREASURY, TOTAL									

DEPARTMENT OF COMMERCE, TOTAL	26,145	-	-	1,185	11,808	4,017	1,615	1,915	5,605
MARITIME ADMINISTRATION	12,596	-	-	-	10,913	820	-	-	863
NATIONAL BUREAU OF STANDARDS	9,876	-	-	-	895	1,633	691	1,915	4,742
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	3,673	-	-	1,185	-	1,564	924	-	-
DEPARTMENT OF DEFENSE, TOTAL	1,009,820	218,815	88,092	42,492	19,313	259,161	66,818	94,705	220,424
DEPARTMENT OF THE ARMY	164,918	29,079	-	20,805	9,019	56,012	13,781	20,007	16,215
DEPARTMENT OF THE NAVY	115,922	12,994	1,007	13,010	4,314	35,577	22,647	20,474	5,899
DEPARTMENT OF THE AIR FORCE	577,126	171,345	84,197	7,017	3,246	125,080	26,845	38,091	121,305
DEFENSE AGENCIES	151,020	5,397	2,888	1,660	2,257	42,424	3,447	16,133	76,814
DEPARTMENTWIDE FUNDS	834	-	-	-	477	68	98	-	191
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	21,500	-	-	-	31	-	-	-	21,469
HEALTH SERVICES & MENTAL HEALTH ADMIN.	31	-	-	-	31	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	21,141	-	-	-	-	-	-	-	21,141
SOCIAL AND REHABILITATION SERVICE	328	-	-	-	-	-	-	-	328
DEPARTMENT OF HOUSING & URBAN DEVELOP.	9,236	-	-	-	5,080	262	200	-	3,694
DEPARTMENT OF THE INTERIOR, TOTAL	46,391	-	-	14,820	6,185	3,537	2,864	17,208	1,777
BONNEVILLE POWER ADMINISTRATION	248	-	-	-	-	248	-	-	-
BUREAU OF MINES	27,939	-	-	8,230	25	1,349	1,146	17,189	-
BUREAU OF RECLAMATION	2,474	-	-	-	2,239	235	-	-	-
GEOLOGICAL SURVEY	1,525	-	-	-	1,288	-	237	-	-
OFFICE OF COAL RESEARCH	4,955	-	-	2,185	-	1,465	1,260	-	45
OFFICE OF SALINE WATER	4,069	-	-	4,069	-	-	-	-	-
OFFICE OF THE SECRETARY	153	-	-	-	-	153	-	-	-
OFFICE OF WATER RESOURCES RESEARCH	5,028	-	-	336	2,633	87	221	19	1,732
DEPARTMENT OF JUSTICE, TOTAL	677	-	-	-	-	405	272	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	272	-	-	-	-	-	272	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	405	-	-	-	-	405	-	-	-
DEPARTMENT OF STATE, TOTAL	1,560	-	-	-	1,242	-	318	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	1,560	-	-	-	1,242	-	318	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	152,755	57,180	244	1,836	23,618	35,035	27,375	3,141	4,326
FEDERAL AVIATION ADMINISTRATION	87,001	55,127	93	-	2,804	28,949	28	-	-
FEDERAL HIGHWAY ADMINISTRATION	20,109	71	47	190	14,830	480	2,592	712	1,187
FEDERAL RAILROAD ADMINISTRATION	17,635	84	-	234	-	569	14,438	-	2,310
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	12,003	-	-	479	-	1,340	8,857	984	343
OFFICE OF THE SECRETARY	7,638	1,879	85	-	2,477	2,172	512	171	342
UNITED STATES COAST GUARD	3,342	19	19	894	659	941	753	10	47
URBAN MASS TRANSPORTATION ADMIN.	5,027	-	-	39	2,848	584	195	1,264	97
DEPARTMENT OF THE TREASURY, TOTAL	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTING	18	-	-	-	-	-	-	18	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION	39,158	-	-	4,600	-	-	-	33,393	1,165
ENVIRONMENTAL PROTECTION AGENCY	21,329	-	175	7,500	7,234	220	6,200	-	-
FEDERAL COMMUNICATIONS COMMISSION	616	-	-	-	-	616	-	-	-
GENERAL SERVICES ADMINISTRATION	41	-	-	-	21	-	-	-	20
NATIONAL AERONAUTICS & SPACE ADMIN.	709,810	289,398	187,119	43,198	-	69,738	47,297	24,390	48,670
NATIONAL SCIENCE FOUNDATION	35,528	1,164	-	6,931	5,108	6,980	5,563	7,636	2,146
OFFICE OF SCIENCE AND TECHNOLOGY	305	45	45	45	43	43	42	42	-
OFFICE OF TELECOMMUNICATIONS POLICY	177	-	-	-	-	177	-	-	-
TENNESSEE VALLEY AUTHORITY	3,877	-	-	1,309	1,972	-	-	-	596
US ARMS CONTROL & DISARMAMENT AGENCY	785	-	418	104	10	-	-	-	253
UNITED STATES INFORMATION AGENCY	108	-	-	-	-	108	-	-	-
VETERANS ADMINISTRATION	1,314	-	-	-	-	-	-	-	1,314

TABLE C-24. FEDERAL OBLIGATIONS FOR RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	2,163,222	539,384	281,614	127,456	116,066	370,514	162,458	201,642	364,088
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	32,322	-	-	4,009	3,886	62	1,728	-	22,637
AGRICULTURAL RESEARCH SERVICE..........	22,343	-	-	3,518	2,902	62	916	-	14,945
COOPERATIVE STATE RESEARCH SERVICE.....	2,819	-	-	-	-	-	-	-	2,819
FOREST SERVICE.........................	7,160	-	-	491	984	-	812	-	4,873
DEPARTMENT OF COMMERCE, TOTAL..........	35,914	-	-	1,503	14,517	4,267	5,889	2,661	7,077
MARITIME ADMINISTRATION................	20,133	-	-	-	12,978	591	4,000	700	1,864
NATIONAL BUREAU OF STANDARDS...........	11,122	-	-	-	1,539	1,692	717	1,961	5,213
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	4,659	-	-	1,503	-	1,984	1,172	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,037,806	218,943	88,214	38,357	22,529	257,380	64,234	101,686	246,463
DEPARTMENT OF THE ARMY.................	154,073	24,089	-	15,188	7,591	49,803	13,839	19,509	24,054
DEPARTMENT OF THE NAVY.................	133,946	14,401	825	14,427	9,335	35,474	27,142	26,836	5,506
DEPARTMENT OF THE AIR FORCE............	593,864	179,525	84,064	6,695	2,859	125,672	20,838	44,175	130,036
DEFENSE AGENCIES.......................	155,029	928	3,325	2,047	2,224	46,355	2,330	11,166	86,654
DEPARTMENTWIDE FUNDS...................	894	-	-	-	520	76	85	-	213
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	26,368	-	-	-	-	-	-	-	26,368
NATIONAL INSTITUTES OF HEALTH..........	25,768	-	-	-	-	-	-	-	25,768
SOCIAL AND REHABILITATION SERVICE......	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP..	14,200	-	-	-	7,952	230	234	246	5,538
DEPARTMENT OF THE INTERIOR, TOTAL......	51,096	-	-	17,966	8,296	1,975	3,074	17,023	2,762
BONNEVILLE POWER ADMINISTRATION........	520	-	-	-	-	520	-	-	-
BUREAU OF MINES........................	28,706	-	-	9,346	1,447	793	1,357	15,763	-
BUREAU OF RECLAMATION..................	3,014	-	-	-	2,794	220	-	-	-
GEOLOGICAL SURVEY......................	1,504	-	-	-	1,334	-	170	-	-
OFFICE OF COAL RESEARCH................	7,500	-	-	4,100	-	-	1,250	1,150	1,000
OFFICE OF SALINE WATER.................	4,130	-	-	4,130	-	-	-	-	-
OFFICE OF THE SECRETARY................	322	-	-	-	-	252	-	70	-
OFFICE OF WATER RESOURCES RESEARCH.....	5,400	-	-	390	2,721	190	297	40	1,762
DEPARTMENT OF JUSTICE, TOTAL...........	1,600	-	-	-	-	1,100	-	500	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,600	-	-	-	-	1,100	-	500	-
DEPARTMENT OF STATE, TOTAL.............	4,387	-	-	-	1,036	-	3,351	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	4,387	-	-	-	1,036	-	3,351	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	132,431	30,721	275	2,753	37,711	24,012	27,090	4,489	5,380
FEDERAL AVIATION ADMINISTRATION........	42,933	27,206	46	-	1,383	14,294	4	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	20,867	73	50	195	15,664	496	2,442	730	1,217
FEDERAL RAILROAD ADMINISTRATION........	20,375	104	-	207	-	622	16,747	-	2,695
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	23,832	-	-	950	11,965	2,661	5,622	1,954	680
OFFICE OF THE SECRETARY................	13,452	3,309	150	-	4,362	3,825	903	301	602
UNITED STATES COAST GUARD..............	5,066	29	29	1,355	999	1,427	1,142	14	71
URBAN MASS TRANSPORTATION ADMIN........	5,906	-	-	46	3,338	687	230	1,490	115
DEPARTMENT OF THE TREASURY, TOTAL......	18	-	-	-	-	-	-	18	-

MARITIME ADMINISTRATION	20,133	-	-	-	12,978	591	4,000	700	1,864
NATIONAL BUREAU OF STANDARDS	11,122	-	-	-	1,539	1,692	717	1,961	5,213
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	4,659	-	-	1,503	-	1,984	1,172	-	-
DEPARTMENT OF DEFENSE, TOTAL	1,037,806	218,943	88,214	38,357	22,529	257,380	64,234	101,686	246,463
DEPARTMENT OF THE ARMY	154,073	24,089	-	15,188	7,591	49,803	13,839	19,509	24,054
DEPARTMENT OF THE NAVY	133,946	14,401	825	14,427	9,335	35,474	27,142	26,836	5,506
DEPARTMENT OF THE AIR FORCE	593,864	179,525	84,064	6,695	2,859	125,672	20,838	44,175	130,036
DEFENSE AGENCIES	155,029	928	3,325	2,047	2,224	46,355	2,330	11,166	86,654
DEPARTMENTWIDE FUNDS	894	-	-	-	520	76	85	-	213
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	26,368	-	-	-	-	-	-	-	26,368
NATIONAL INSTITUTES OF HEALTH	25,768	-	-	-	-	-	-	-	25,768
SOCIAL AND REHABILITATION SERVICE	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP.	14,200	-	-	-	7,952	230	234	246	5,538
DEPARTMENT OF THE INTERIOR, TOTAL	51,096	-	-	17,966	8,296	1,975	3,074	17,023	2,762
BONNEVILLE POWER ADMINISTRATION	520	-	-	-	-	520	-	-	-
BUREAU OF MINES	28,706	-	-	9,346	1,447	793	1,357	15,763	-
BUREAU OF RECLAMATION	3,014	-	-	-	2,794	220	-	-	-
GEOLOGICAL SURVEY	1,504	-	-	-	1,334	-	170	-	-
OFFICE OF COAL RESEARCH	7,500	-	-	4,100	-	-	1,250	1,150	1,000
OFFICE OF SALINE WATER	4,130	-	-	4,130	-	-	-	-	-
OFFICE OF THE SECRETARY	322	-	-	-	-	252	-	70	-
OFFICE OF WATER RESOURCES RESEARCH	5,400	-	-	390	2,721	190	297	40	1,762
DEPARTMENT OF JUSTICE, TOTAL	1,600	-	-	-	-	1,100	-	500	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	1,600	-	-	-	-	1,100	-	500	-
DEPARTMENT OF STATE, TOTAL	4,387	-	-	-	1,036	-	3,351	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	4,387	-	-	-	1,036	-	3,351	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	132,431	30,721	275	2,753	37,711	24,012	27,090	4,489	5,380
FEDERAL AVIATION ADMINISTRATION	42,933	27,206	46	-	1,383	14,294	4	-	-
FEDERAL HIGHWAY ADMINISTRATION	20,867	73	50	195	15,664	496	2,442	730	1,217
FEDERAL RAILROAD ADMINISTRATION	20,375	104	-	207	-	622	16,747	-	2,695
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	23,832	-	-	950	11,965	2,661	5,622	1,954	680
OFFICE OF THE SECRETARY	13,452	3,309	150	-	4,362	3,825	903	301	602
UNITED STATES COAST GUARD	5,066	29	29	1,355	999	1,427	1,142	14	71
URBAN MASS TRANSPORTATION ADMIN.	5,906	-	-	46	3,338	687	230	1,490	115
DEPARTMENT OF THE TREASURY, TOTAL	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTING	18	-	-	-	-	-	-	18	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION	37,479	-	-	4,648	-	-	-	31,964	867
ENVIRONMENTAL PROTECTION AGENCY	30,247	-	175	9,300	12,222	250	8,300	-	-
FEDERAL COMMUNICATIONS COMMISSION	774	-	-	-	-	774	-	-	-
GENERAL SERVICES ADMINISTRATION	399	-	-	-	374	-	-	-	25
NATIONAL AERONAUTICS & SPACE ADMIN.	690,299	287,557	192,394	38,037	-	64,408	40,290	28,541	39,072
NATIONAL SCIENCE FOUNDATION	58,951	2,118	-	9,322	4,917	15,041	8,225	14,472	4,856
OFFICE OF SCIENCE AND TECHNOLOGY	307	45	45	45	44	43	43	42	-
OFFICE OF TELECOMMUNICATIONS POLICY	810	-	-	-	-	810	-	-	-
TENNESSEE VALLEY AUTHORITY	5,396	-	-	1,391	2,582	-	-	-	1,423
US ARMS CONTROL & DISARMAMENT AGENCY	836	-	511	125	-	-	-	-	200
UNITED STATES INFORMATION AGENCY	162	-	-	-	-	162	-	-	-
VETERANS ADMINISTRATION	1,420	-	-	-	-	-	-	-	1,420

TABLE C-25. FEDERAL OBLIGATIONS FOR RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	2,258,121	665,448	263,052	128,308	141,675	278,244	150,961	227,275	403,158
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	32,163	-	-	3,971	3,821	59	1,731	-	22,581
AGRICULTURAL RESEARCH SERVICE..........	21,746	-	-	3,461	2,801	59	888	-	14,537
COOPERATIVE STATE RESEARCH SERVICE.....	2,990	-	-	-	-	-	-	-	2,990
FOREST SERVICE.........................	7,427	-	-	510	1,020	-	843	-	5,054
DEPARTMENT OF COMMERCE, TOTAL..........	56,550	-	-	1,867	16,936	6,881	6,463	2,662	21,741
MARITIME ADMINISTRATION................	24,374	-	-	-	15,174	2,700	4,000	500	2,000
NATIONAL BUREAU OF STANDARDS...........	26,390	-	-	-	1,762	1,717	1,008	2,162	19,741
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	5,786	-	-	1,867	-	2,464	1,455	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,072,704	333,972	76,092	33,504	26,340	174,063	61,781	110,109	256,843
DEPARTMENT OF THE ARMY.................	154,917	26,891	-	10,253	11,172	49,523	12,873	21,723	22,482
DEPARTMENT OF THE NAVY.................	138,140	16,090	620	15,698	8,373	36,551	27,219	29,199	4,390
DEPARTMENT OF THE AIR FORCE............	620,158	290,391	74,047	5,953	4,398	47,921	21,612	45,180	130,656
DEFENSE AGENCIES.......................	158,623	600	1,425	1,600	1,919	39,981	-	14,007	99,091
DEPARTMENTWIDE FUNDS...................	866	-	-	-	478	87	77	-	224
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	28,492	-	-	-	-	-	-	-	28,492
NATIONAL INSTITUTES OF HEALTH..........	27,892	-	-	-	-	-	-	-	27,892
SOCIAL AND REHABILITATION SERVICE......	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP..	13,838	-	-	-	5,812	1,107	830	692	5,397
DEPARTMENT OF THE INTERIOR, TOTAL......	51,959	-	-	17,411	7,858	3,733	1,827	18,563	2,567
BONNEVILLE POWER ADMINISTRATION........	627	-	-	-	-	627	-	-	-
BUREAU OF MINES........................	28,892	-	-	8,266	1,364	749	1,310	17,203	-
BUREAU OF RECLAMATION..................	2,625	-	-	-	2,408	217	-	-	-
GEOLOGICAL SURVEY......................	1,585	-	-	-	1,365	-	220	-	-
OFFICE OF COAL RESEARCH................	8,505	-	-	4,700	-	1,750	-	1,250	805
OFFICE OF SALINE WATER.................	4,055	-	-	4,055	-	-	-	-	-
OFFICE OF THE SECRETARY................	270	-	-	-	-	200	-	70	-
OFFICE OF WATER RESOURCES RESEARCH.....	5,400	-	-	390	2,721	190	297	40	1,762
DEPARTMENT OF JUSTICE, TOTAL...........	1,900	-	-	300	-	1,200	-	400	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,900	-	-	300	-	1,200	-	400	-
DEPARTMENT OF STATE, TOTAL.............	1,600	-	-	-	1,150	450	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,600	-	-	-	1,150	450	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	162,354	23,626	368	3,146	54,015	23,076	43,034	6,338	8,751
FEDERAL AVIATION ADMINISTRATION........	28,531	18,071	31	-	920	9,500	9	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	33,131	112	74	299	25,134	757	3,758	1,124	1,873
FEDERAL RAILROAD ADMINISTRATION........	35,821	182	-	364	-	1,093	29,353	-	4,829
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	30,205	-	-	1,204	15,166	3,372	7,125	2,476	862
OFFICE OF THE SECRETARY................	21,284	5,236	238	-	6,902	6,052	1,428	476	952
UNITED STATES COAST GUARD..............	4,519	25	25	1,210	891	1,273	1,018	13	64
URBAN MASS TRANSPORTATION ADMIN........	8,863	-	-	69	5,002	1,029	343	2,249	171
DEPARTMENT OF THE TREASURY, TOTAL									

PARTMENT OF COMMERCE, TOTAL	56,550	-	-	1,867	16,936	6,881	6,463	2,662	21,741
MARITIME ADMINISTRATION	24,374	-	-	-	15,174	2,700	4,000	500	2,000
NATIONAL BUREAU OF STANDARDS	26,390	-	-	-	1,762	1,717	1,008	2,162	19,741
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	5,786	-	-	1,867	-	2,464	1,455	-	-
DEPARTMENT OF DEFENSE, TOTAL	1,072,704	333,972	76,092	33,504	26,340	174,063	61,781	110,109	256,843
DEPARTMENT OF THE ARMY	154,917	26,891	-	10,253	11,172	49,523	12,873	21,723	22,482
DEPARTMENT OF THE NAVY	138,140	16,090	620	15,698	8,373	36,551	27,219	29,199	4,390
DEPARTMENT OF THE AIR FORCE	620,158	290,391	74,047	5,953	4,398	47,921	21,612	45,180	130,656
DEFENSE AGENCIES	158,623	600	1,425	1,600	1,919	39,981	-	14,007	99,091
DEPARTMENTWIDE FUNDS	866	-	-	-	478	87	77	-	224
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	28,492	-	-	-	-	-	-	-	28,492
NATIONAL INSTITUTES OF HEALTH	27,892	-	-	-	-	-	-	-	27,892
SOCIAL AND REHABILITATION SERVICE	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP.	13,838	-	-	-	5,812	1,107	830	692	5,397
DEPARTMENT OF THE INTERIOR, TOTAL	51,959	-	-	17,411	7,858	3,733	1,827	18,563	2,567
BONNEVILLE POWER ADMINISTRATION	627	-	-	-	-	627	-	-	-
BUREAU OF MINES	28,892	-	-	8,266	1,364	749	1,310	17,203	-
BUREAU OF RECLAMATION	2,625	-	-	-	2,408	217	-	-	-
GEOLOGICAL SURVEY	1,585	-	-	-	1,365	-	220	-	-
OFFICE OF COAL RESEARCH	8,505	-	-	4,700	-	1,750	-	1,250	805
OFFICE OF SALINE WATER	4,055	-	-	4,055	-	-	-	-	-
OFFICE OF THE SECRETARY	270	-	-	-	-	200	-	70	-
OFFICE OF WATER RESOURCES RESEARCH	5,400	-	-	390	2,721	190	297	40	1,762
DEPARTMENT OF JUSTICE, TOTAL	1,900	-	-	300	-	1,200	-	400	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	1,900	-	-	300	-	1,200	-	400	-
DEPARTMENT OF STATE, TOTAL	1,600	-	-	-	1,150	450	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	1,600	-	-	-	1,150	450	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	162,354	23,626	368	3,146	54,015	23,076	43,034	6,338	8,751
FEDERAL AVIATION ADMINISTRATION	28,531	18,071	31	-	920	9,500	9	-	-
FEDERAL HIGHWAY ADMINISTRATION	33,131	112	74	299	25,134	757	3,758	1,124	1,873
FEDERAL RAILROAD ADMINISTRATION	35,821	182	-	364	-	1,093	29,353	-	4,829
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	30,205	-	-	1,204	15,166	3,372	7,125	2,476	862
OFFICE OF THE SECRETARY	21,284	5,236	238	-	6,902	6,052	1,428	476	952
UNITED STATES COAST GUARD	4,519	25	25	1,210	891	1,273	1,018	13	64
URBAN MASS TRANSPORTATION ADMIN.	8,863	-	-	69	5,002	1,029	343	2,249	171
DEPARTMENT OF THE TREASURY, TOTAL	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTING	18	-	-	-	-	-	-	18	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION	37,356	-	-	4,471	-	-	-	31,980	905
ENVIRONMENTAL PROTECTION AGENCY	34,951	200	200	11,600	14,100	300	8,551	-	-
FEDERAL COMMUNICATIONS COMMISSION	803	-	-	-	-	803	-	-	-
GENERAL SERVICES ADMINISTRATION	487	-	-	-	487	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.	670,421	305,252	185,806	37,684	-	48,395	14,683	31,699	46,902
NATIONAL SCIENCE FOUNDATION	82,183	2,352	-	12,702	8,742	16,733	12,017	24,771	4,866
OFFICE OF SCIENCE AND TECHNOLOGY	313	46	46	45	45	44	44	43	-
OFFICE OF TELECOMMUNICATIONS POLICY	1,300	-	-	-	-	1,300	-	-	-
TENNESSEE VALLEY AUTHORITY	6,071	-	-	1,497	2,369	-	-	-	2,205
US ARMS CONTROL & DISARMAMENT AGENCY	990	-	540	110	-	-	-	-	340
UNITED STATES INFORMATION AGENCY	100	-	-	-	-	100	-	-	-
VETERANS ADMINISTRATION	1,568	-	-	-	-	-	-	-	1,568

TABLE C-26. FEDERAL OBLIGATIONS FOR RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	305,650	11,660	74,511	4,178	3,079	5,103	104,650	102,469
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	36,816	-	34,924	180	-	51	1,452	209
AGRICULTURAL RESEARCH SERVICE..........	1,827	-	1,724	-	-	-	48	55
COOPERATIVE STATE RESEARCH SERVICE.....	15,066	-	14,268	-	-	-	798	-
ECONOMIC RESEARCH SERVICE..............	15,534	-	14,837	180	-	51	312	154
FARMER COOPERATIVE SERVICE.............	1,017	-	1,017	-	-	-	-	-
FOREST SERVICE.........................	3,101	-	2,807	-	-	-	294	-
STATISTICAL REPORTING SERVICE..........	271	-	271	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	4,836	-	4,314	-	-	-	522	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	-	1,726	-	-	-	-	-
MARITIME ADMINISTRATION................	609	-	609	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,438	-	1,438	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,063	-	541	-	-	-	522	-
DEPARTMENT OF DEFENSE, TOTAL...........	5,474	424	948	-	366	1,690	1,490	556
DEPARTMENT OF THE ARMY.................	3,601	424	805	-	-	926	1,186	260
DEFENSE AGENCIES.......................	1,407	-	-	-	366	753	-	288
DEPARTMENTWIDE FUNDS...................	466	-	143	-	-	11	304	8
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	123,084	3,649	4,933	21	2,109	550	26,779	85,043
HEALTH SERVICES & MENTAL HEALTH ADMIN..	30,875	1,599	4,933	21	1,871	525	19,273	2,653
NATIONAL INSTITUTES OF HEALTH..........	5,571	-	-	-	-	-	-	5,571
OFFICE OF CHILD DEVELOPMENT............	5,852	2,050	-	-	-	-	3,802	-
OFFICE OF EDUCATION....................	55,089	-	-	-	238	25	-	54,826
SOCIAL AND REHABILITATION SERVICE......	14,764	-	-	-	-	-	3,704	11,060
SOCIAL SECURITY ADMINISTRATION.........	10,933	-	-	-	-	-	-	10,933
DEPARTMENT OF HOUSING & URBAN DEVELOP..	1,050	-	630	-	-	-	420	-
DEPARTMENT OF THE INTERIOR, TOTAL......	2,706	954	1,034	9	-	306	227	176
BUREAU OF LAND MANAGEMENT..............	57	-	57	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	185	-	50	-	-	100	20	15
BUREAU OF RECLAMATION..................	65	-	65	-	-	-	-	-
NATIONAL PARK SERVICE..................	954	954	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,445	-	862	9	-	206	207	161
DEPARTMENT OF JUSTICE, TOTAL...........	2,359	-	150	25	-	27	932	1,225
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	209	-	-	-	-	27	182	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	2,150	-	150	25	-	-	750	1,225
DEPARTMENT OF LABOR, TOTAL.............	13,622	-	13,460	-	-	-	-	162
BUREAU OF LABOR STATISTICS.............	2,853	-	2,853	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	-	1,501	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	-	547	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,233	-	8,233	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	-	326	-	-	-	-	-
OFFICE OF THE SECRETARY................	162	-	-	-	-	-	-	162
DEPARTMENT OF STATE, TOTAL.............	6,749	-	2,124	-	-	589	3,486	550
DEPARTMENTAL FUNDS.....................	350	-	-	-	-	-	-	350
AGENCY FOR INTERNATIONAL DEVELOPMENT...	6,399	-	2,124	-	-	589	3,486	200
DEPARTMENT OF TRANSPORTATION, TOTAL....	7,652	-	2,962	370	467	233	3,620	-
FEDERAL AVIATION ADMINISTRATION........	2,336	-	1,869	-	467	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	973	-	712	-	-	119	142	-

NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,438	-	1,438	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,063	-	541	-	-	-	522	-
DEPARTMENT OF DEFENSE, TOTAL...........	5,474	424	948	-	366	1,690	1,490	556
DEPARTMENT OF THE ARMY.................	3,601	424	805	-	-	926	1,186	260
DEFENSE AGENCIES.......................	1,407	-	-	-	366	753	-	288
DEPARTMENTWIDE FUNDS...................	466	-	143	-	-	11	304	8
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	123,084	3,649	4,933	21	2,109	550	26,779	85,043
HEALTH SERVICES & MENTAL HEALTH ADMIN..	30,875	1,599	4,933	21	1,871	525	19,273	2,653
NATIONAL INSTITUTES OF HEALTH..........	5,571	-	-	-	-	-	-	5,571
OFFICE OF CHILD DEVELOPMENT............	5,852	2,050	-	-	-	-	3,802	-
OFFICE OF EDUCATION....................	55,089	-	-	-	238	25	-	54,826
SOCIAL AND REHABILITATION SERVICE......	14,764	-	-	-	-	-	3,704	11,060
SOCIAL SECURITY ADMINISTRATION.........	10,933	-	-	-	-	-	-	10,933
DEPARTMENT OF HOUSING & URBAN DEVELOP..	1,050	-	630	-	-	-	420	-
DEPARTMENT OF THE INTERIOR, TOTAL......	2,706	954	1,034	9	-	306	227	176
BUREAU OF LAND MANAGEMENT..............	57	-	57	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	185	-	50	-	-	100	20	15
BUREAU OF RECLAMATION..................	65	-	65	-	-	-	-	-
NATIONAL PARK SERVICE..................	954	954	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,445	-	862	9	-	206	207	161
DEPARTMENT OF JUSTICE, TOTAL...........	2,359	-	150	25	-	27	932	1,225
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	209	-	-	-	-	27	182	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	2,150	-	150	25	-	-	750	1,225
DEPARTMENT OF LABOR, TOTAL.............	13,622	-	13,460	-	-	-	-	162
BUREAU OF LABOR STATISTICS.............	2,853	-	2,853	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	-	1,501	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	-	547	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,233	-	8,233	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	-	326	-	-	-	-	-
OFFICE OF THE SECRETARY................	162	-	-	-	-	-	-	162
DEPARTMENT OF STATE, TOTAL.............	6,749	-	2,124	-	-	589	3,486	550
DEPARTMENTAL FUNDS.....................	350	-	-	-	-	-	-	350
AGENCY FOR INTERNATIONAL DEVELOPMENT...	6,399	-	2,124	-	-	589	3,486	200
DEPARTMENT OF TRANSPORTATION, TOTAL....	7,652	-	2,962	370	467	233	3,620	-
FEDERAL AVIATION ADMINISTRATION........	2,336	-	1,869	-	467	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	973	-	712	-	-	119	142	-
FEDERAL RAILROAD ADMINISTRATION........	143	-	143	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	285	-	-	285	-	-	-	-
OFFICE OF THE SECRETARY................	384	-	43	85	-	85	171	-
URBAN MASS TRANSPORTATION ADMIN........	3,531	-	195	-	-	29	3,307	-
OTHER AGENCIES								
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	-	272	-	-	272	-	-
APPALACHIAN REGIONAL COMMISSION........	2,980	-	-	-	-	-	-	2,980
CIVIL AERONAUTICS BOARD................	277	-	277	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	802	-	615	-	-	-	187	-
FEDERAL HOME LOAN BANK BOARD...........	395	-	395	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	440	-	440	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	26,453	3,999	5,981	733	137	1,176	2,861	11,566
OFFICE OF ECONOMIC OPPORTUNITY.........	63,112	-	673	-	-	-	62,439	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	20	3	3	3	-	7	2	2
SMITHSONIAN INSTITUTION................	5,468	2,631	-	2,837	-	-	-	-
TENNESSEE VALLEY AUTHORITY.............	232	-	232	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	346	-	144	-	-	202	-	-
VETERANS ADMINISTRATION................	233	-	-	-	-	-	233	-

TABLE C-27. FEDERAL OBLIGATIONS FOR RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	330,495	12,803	85,516	5,492	3,243	5,553	117,862	100,026
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	41,383	-	39,285	181	-	51	1,653	213
AGRICULTURAL RESEARCH SERVICE..........	2,765	-	2,656	-	-	-	50	59
COOPERATIVE STATE RESEARCH SERVICE.....	18,292	-	17,323	-	-	-	969	-
ECONOMIC RESEARCH SERVICE..............	15,638	-	14,939	181	-	51	313	154
FARMER COOPERATIVE SERVICE.............	1,034	-	1,034	-	-	-	-	-
FOREST SERVICE.........................	3,378	-	3,057	-	-	-	321	-
STATISTICAL REPORTING SERVICE..........	276	-	276	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	6,673	-	6,279	-	-	-	394	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	-	1,284	-	-	-	-	-
MARITIME ADMINISTRATION................	2,762	-	2,762	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,824	-	1,824	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	803	-	409	-	-	-	394	-
DEPARTMENT OF DEFENSE, TOTAL...........	6,330	972	1,095	-	305	1,353	1,611	994
DEPARTMENT OF THE ARMY.................	5,529	972	979	-	100	1,338	1,409	731
DEFENSE AGENCIES.......................	468	-	-	-	205	-	-	263
DEPARTMENTWIDE FUNDS...................	333	-	116	-	-	15	202	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	113,788	4,018	5,553	24	2,861	986	30,424	69,922
HEALTH SERVICES & MENTAL HEALTH ADMIN..	35,200	2,218	5,553	24	2,546	811	22,402	1,646
NATIONAL INSTITUTES OF HEALTH..........	6,788	-	-	-	-	-	-	6,788
OFFICE OF CHILD DEVELOPMENT............	6,300	1,800	-	-	-	-	4,500	-
OFFICE OF EDUCATION....................	47,076	-	-	-	315	175	-	46,586
SOCIAL AND REHABILITATION SERVICE......	6,037	-	-	-	-	-	3,522	2,515
SOCIAL SECURITY ADMINISTRATION.........	12,387	-	-	-	-	-	-	12,387
DEPARTMENT OF HOUSING & URBAN DEVELOP..	5,462	-	3,223	-	-	-	2,239	-
DEPARTMENT OF THE INTERIOR, TOTAL......	2,848	1,001	1,121	23	-	276	251	176
BUREAU OF LAND MANAGEMENT..............	58	-	58	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	85	-	35	5	-	25	10	10
BUREAU OF RECLAMATION..................	131	-	131	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,001	1,001	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,573	-	897	18	-	251	241	166
DEPARTMENT OF JUSTICE, TOTAL...........	7,197	-	500	-	-	49	2,748	3,900
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	297	-	-	-	-	49	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	6,900	-	500	-	-	-	2,500	3,900
DEPARTMENT OF LABOR, TOTAL.............	14,542	-	14,336	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	3,060	-	3,060	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	-	1,867	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	-	856	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,403	-	8,403	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	-	150	-	-	-	-	-
OFFICE OF THE SECRETARY................	206	-	-	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	10,104	-	2,149	-	-	334	5,111	2,510
DEPARTMENTAL FUNDS.....................	550	-	-					

DEPARTMENT OF COMMERCE, TOTAL..........	6,673	-	6,279	-	-	-	394	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	-	1,284	-	-	-	-	-
MARITIME ADMINISTRATION................	2,762	-	2,762	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,824	-	1,824	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	803	-	409	-	-	-	394	-
DEPARTMENT OF DEFENSE, TOTAL...........	6,330	972	1,095	-	305	1,353	1,611	994
DEPARTMENT OF THE ARMY.................	5,529	972	979	-	100	1,338	1,409	731
DEFENSE AGENCIES.......................	468	-	-	-	205	-	-	263
DEPARTMENTWIDE FUNDS...................	333	-	116	-	-	15	202	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	113,788	4,018	5,553	24	2,861	986	30,424	69,922
HEALTH SERVICES & MENTAL HEALTH ADMIN..	35,200	2,218	5,553	24	2,546	811	22,402	1,646
NATIONAL INSTITUTES OF HEALTH..........	6,788	-	-	-	-	-	-	6,788
OFFICE OF CHILD DEVELOPMENT............	6,300	1,800	-	-	-	-	4,500	-
OFFICE OF EDUCATION....................	47,076	-	-	-	315	175	-	46,586
SOCIAL AND REHABILITATION SERVICE......	6,037	-	-	-	-	-	3,522	2,515
SOCIAL SECURITY ADMINISTRATION.........	12,387	-	-	-	-	-	-	12,387
DEPARTMENT OF HOUSING & URBAN DEVELOP..	5,462	-	3,223	-	-	-	2,239	-
DEPARTMENT OF THE INTERIOR, TOTAL......	2,848	1,001	1,121	23	-	276	251	176
BUREAU OF LAND MANAGEMENT..............	58	-	58	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	85	-	35	5	-	25	10	10
BUREAU OF RECLAMATION..................	131	-	131	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,001	1,001	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,573	-	897	18	-	251	241	166
DEPARTMENT OF JUSTICE, TOTAL...........	7,197	-	500	-	-	49	2,748	3,900
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	297	-	-	-	-	49	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	6,900	-	500	-	-	-	2,500	3,900
DEPARTMENT OF LABOR, TOTAL.............	14,542	-	14,336	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	3,060	-	3,060	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	-	1,867	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	-	856	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,403	-	8,403	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	-	150	-	-	-	-	-
OFFICE OF THE SECRETARY................	206	-	-	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	10,104	-	2,149	-	-	334	5,111	2,510
DEPARTMENTAL FUNDS.....................	550	-	-	-	-	-	-	550
AGENCY FOR INTERNATIONAL DEVELOPMENT...	9,554	-	2,149	-	-	334	5,111	1,960
DEPARTMENT OF TRANSPORTATION, TOTAL....	7,644	-	2,191	716	70	307	4,360	-
FEDERAL AVIATION ADMINISTRATION........	1,060	-	990	-	70	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	998	-	730	-	-	122	146	-
FEDERAL RAILROAD ADMINISTRATION........	166	-	166	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	566	-	-	566	-	-	-	-
OFFICE OF THE SECRETARY................	676	-	75	150	-	150	301	-
URBAN MASS TRANSPORTATION ADMIN........	4,178	-	230	-	-	35	3,913	-
OTHER AGENCIES								
ADVISORY COMM ON INTERGOVERNMENTAL REL.	581	-	261	-	-	320	-	-
APPALACHIAN REGIONAL COMMISSION........	2,974	-	-	-	-	-	-	2,974
CIVIL AERONAUTICS BOARD................	294	-	294	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	1,200	-	985	-	-	-	215	-
FEDERAL HOME LOAN BANK BOARD...........	503	-	503	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	580	-	580	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	33,652	3,800	6,056	900	7	1,760	2,000	19,129
OFFICE OF ECONOMIC OPPORTUNITY.........	67,301	-	700	-	-	-	66,601	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	20	3	3	3	-	7	2	2
SMITHSONIAN INSTITUTION................	6,654	3,009	-	3,645	-	-	-	-
TENNESSEE VALLEY AUTHORITY.............	216	-	216	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	296	-	186	-	-	110	-	-
VETERANS ADMINISTRATION................	253	-	-	-	-	-	253	-

TABLE C-28. FEDERAL OBLIGATIONS FOR RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	403,045	15,596	90,341	6,195	4,025	8,209	126,800	151,879
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	45,093	-	42,867	195	-	55	1,749	227
AGRICULTURAL RESEARCH SERVICE..........	3,979	-	3,871	-	-	-	49	59
COOPERATIVE STATE RESEARCH SERVICE.....	19,404	-	18,376	-	-	-	1,028	-
ECONOMIC RESEARCH SERVICE..............	16,836	-	16,079	195	-	55	339	168
FARMER COOPERATIVE SERVICE.............	1,034	-	1,034	-	-	-	-	-
FOREST SERVICE.........................	3,506	-	3,173	-	-	-	333	-
STATISTICAL REPORTING SERVICE..........	334	-	334	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	5,023	-	4,678	-	-	-	345	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,354	-	1,354	-	-	-	-	-
MARITIME ADMINISTRATION................	700	-	700	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	2,265	-	2,265	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	704	-	359	-	-	-	345	-
DEPARTMENT OF DEFENSE, TOTAL...........	8,631	1,458	730	-	200	1,907	3,431	905
DEPARTMENT OF THE ARMY.................	7,723	1,458	615	-	-	1,892	3,153	605
DEFENSE AGENCIES.......................	500	-	-	-	200	-	-	300
DEPARTMENTWIDE FUNDS...................	408	-	115	-	-	15	278	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	163,584	4,591	5,000	24	3,407	1,050	31,332	118,180
HEALTH SERVICES & MENTAL HEALTH ADMIN..	34,846	2,491	5,000	24	2,957	900	22,810	664
NATIONAL INSTITUTE OF EDUCATION........	73,381	-	-	-	-	-	-	73,381
NATIONAL INSTITUTES OF HEALTH..........	7,336	-	-	-	-	-	-	7,336
OFFICE OF CHILD DEVELOPMENT............	7,100	2,100	-	-	-	-	5,000	-
OFFICE OF EDUCATION....................	22,218	-	-	-	450	150	-	21,618
SOCIAL AND REHABILITATION SERVICE......	6,065	-	-	-	-	-	3,522	2,543
SOCIAL SECURITY ADMINISTRATION.........	12,638	-	-	-	-	-	-	12,638
DEPARTMENT OF HOUSING & URBAN DEVELOP..	6,290	-	1,761	-	-	944	2,390	1,195
DEPARTMENT OF THE INTERIOR, TOTAL......	3,137	1,325	1,079	18	-	266	278	171
BUREAU OF LAND MANAGEMENT..............	62	-	62	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	82	-	25	-	-	15	37	5
BUREAU OF RECLAMATION..................	95	-	95	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,325	1,325	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,573	-	897	18	-	251	241	166
DEPARTMENT OF JUSTICE, TOTAL...........	8,348	-	600	-	-	-	3,148	4,600
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	248	-	-	-	-	-	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	8,100	-	600	-	-	-	2,900	4,600
DEPARTMENT OF LABOR, TOTAL.............	15,837	-	15,631	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	2,897	-	2,897	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	-	1,874	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	-	1,164	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,396	-	8,396	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	-	300	-	-	-	-	-
OFFICE OF THE SECRETARY................	1,206	-	1,000	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	13,789	-	4,645	-	-	1,170	7,224	750
DEPARTMENTAL FUNDS.....................	750	-	-	-	-	-	-	750
AGENCY FOR INTERNATIONAL DEVELOPMENT...	13,039	-	4,645	-	-	1,170	7,224	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	10,605	-	2,491	956	153	476	6,529	-
FEDERAL AVIATION ADMINISTRATION........	766	-	613	-	153	-	-	-

DEPARTMENT OF DEFENSE, TOTAL...........	8,631	1,458	730	-	200	1,907	3,431	905
DEPARTMENT OF THE ARMY.................	7,723	1,458	615	-	-	1,892	3,153	605
DEFENSE AGENCIES.......................	500	-	-	-	200	-	-	300
DEPARTMENTWIDE FUNDS...................	408	-	115	-	-	15	278	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	163,584	4,591	5,000	24	3,407	1,050	31,332	118,180
HEALTH SERVICES & MENTAL HEALTH ADMIN..	34,846	2,491	5,000	24	2,957	900	22,810	664
NATIONAL INSTITUTE OF EDUCATION........	73,381	-	-	-	-	-	-	73,381
NATIONAL INSTITUTES OF HEALTH..........	7,336	-	-	-	-	-	-	7,336
OFFICE OF CHILD DEVELOPMENT............	7,100	2,100	-	-	-	-	5,000	-
OFFICE OF EDUCATION....................	22,218	-	-	-	450	150	-	21,618
SOCIAL AND REHABILITATION SERVICE......	6,065	-	-	-	-	-	3,522	2,543
SOCIAL SECURITY ADMINISTRATION.........	12,638	-	-	-	-	-	-	12,638
DEPARTMENT OF HOUSING & URBAN DEVELOP..	6,290	-	1,761	-	-	944	2,390	1,195
DEPARTMENT OF THE INTERIOR, TOTAL......	3,137	1,325	1,079	18	-	266	278	171
BUREAU OF LAND MANAGEMENT..............	62	-	62	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	82	-	25	-	-	15	37	5
BUREAU OF RECLAMATION..................	95	-	95	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,325	1,325	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,573	-	897	18	-	251	241	166
DEPARTMENT OF JUSTICE, TOTAL...........	8,348	-	600	-	-	-	3,148	4,600
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	248	-	-	-	-	-	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	8,100	-	600	-	-	-	2,900	4,600
DEPARTMENT OF LABOR, TOTAL.............	15,837	-	15,631	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	2,897	-	2,897	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	-	1,874	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	-	1,164	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,396	-	8,396	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	-	300	-	-	-	-	-
OFFICE OF THE SECRETARY................	1,206	-	1,000	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	13,789	-	4,645	-	-	1,170	7,224	750
DEPARTMENTAL FUNDS.....................	750	-	-	-	-	-	-	750
AGENCY FOR INTERNATIONAL DEVELOPMENT...	13,039	-	4,645	-	-	1,170	7,224	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	10,605	-	2,491	956	153	476	6,529	-
FEDERAL AVIATION ADMINISTRATION........	766	-	613	-	153	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	1,535	-	1,124	-	-	187	224	-
FEDERAL RAILROAD ADMINISTRATION........	292	-	292	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	718	-	-	718	-	-	-	-
OFFICE OF THE SECRETARY................	1,071	-	119	238	-	238	476	-
URBAN MASS TRANSPORTATION ADMIN........	6,223	-	343	-	-	51	5,829	-
OTHER AGENCIES								
ACTION.................................	25	-	20	-	5	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	567	-	283	-	-	284	-	-
APPALACHIAN REGIONAL COMMISSION........	3,000	-	-	-	-	-	-	3,000
CIVIL AERONAUTICS BOARD................	297	-	297	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	1,600	-	1,300	-	-	-	300	-
FEDERAL HOME LOAN BANK BOARD...........	582	-	582	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	633	-	633	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	39,063	4,150	6,860	900	260	1,950	2,300	22,643
OFFICE OF ECONOMIC OPPORTUNITY.........	67,893	-	400	-	-	-	67,493	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	20	3	3	3	-	7	2	2
SMITHSONIAN INSTITUTION................	8,168	4,069	-	4,099	-	-	-	-
TENNESSEE VALLEY AUTHORITY.............	221	-	221	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	360	-	260	-	-	100	-	-
VETERANS ADMINISTRATION................	279	-	-	-	-	-	279	-

TABLE C-29. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRAMURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NONPROFIT INSTITUTIONS	FFRDCS ADMIN. BY NONPROFIT INSTITUTIONS	OTHER	
TOTAL, ALL AGENCIES	2,132,348	534,631	412,488	29,227	794,356	260,029	72,411	2,140	19,191	7,875
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	118,414	86,500	64	-	28,334	-	343	-	134	3,039
AGRICULTURAL RESEARCH SERVICE	72,070	65,833	64	-	2,794	-	340	-	-	3,039
COOPERATIVE STATE RESEARCH SERVICE	25,750	803	-	-	24,830	-	-	-	117	-
ECONOMIC RESEARCH SERVICE	4,660	4,523	-	-	120	-	-	-	17	-
FARMER COOPERATIVE SERVICE	203	203	-	-	-	-	-	-	-	-
FOREST SERVICE	15,651	15,091	-	-	557	-	3	-	-	-
STATISTICAL REPORTING SERVICE	80	47	-	-	33	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	41,777	35,321	220	-	4,277	35	550	-	1,301	73
MARITIME ADMINISTRATION	399	39	220	-	140	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS	14,496	14,035	-	-	443	-	-	-	-	18
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	26,066	20,493	-	-	3,662	35	520	-	1,301	55
OFFICE OF TELECOMMUNICATIONS	470	470	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	346	284	-	-	32	-	30	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	261,545	98,998	35,131	-	119,742	100	5,637	300	-	1,637
DEPARTMENT OF THE ARMY	46,509	27,512	2,264	-	13,916	-	1,869	300	-	648
DEPARTMENT OF THE NAVY	85,778	27,905	7,229	-	47,894	100	2,519	-	-	131
DEPARTMENT OF THE AIR FORCE	84,719	42,733	7,860	-	32,783	-	485	-	-	858
DEFENSE AGENCIES	44,539	848	17,778	-	25,149	-	764	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	397,316	67,466	-	-	266,826	704	50,863	214	9,816	1,427
HEALTH SERVICES & MENTAL HEALTH ADMIN.	63,568	23,492	-	-	29,386	-	8,756	-	1,840	94
NATIONAL INSTITUTES OF HEALTH	326,500	43,400	-	-	232,417	189	41,356	214	7,591	1,333
OFFICE OF EDUCATION	6,815	141	-	-	5,023	515	751	-	385	-
SOCIAL SECURITY ADMINISTRATION	433	433	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	52,690	41,218	334	-	5,463	-	579	-	5,024	72
BUREAU OF MINES	6,525	5,835	-	-	690	-	-	-	-	-
BUREAU OF RECLAMATION	59	27	-	-	32	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE	9,110	3,526	-	-	445	-	176	-	4,963	-
GEOLOGICAL SURVEY	31,619	31,456	-	-	163	-	-	-	-	-
NATIONAL PARK SERVICE	704	46	-	-	658	-	-	-	-	-
OFFICE OF SALINE WATER	2,041	155	125	-	1,402	-	287	-	-	72
OFFICE OF WATER RESOURCES RESEARCH	2,632	173	209	-	2,073	-	116	-	61	-
DEPARTMENT OF LABOR, TOTAL	2,502	2,072	55	-	138	-	160	-	77	-
BUREAU OF LABOR STATISTICS	1,403	1,403	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN.	547	547	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION	552	122	55	-	138	-	160	-	77	-

DEPARTMENT OF AGRICULTURE, TOTAL.......	118,414	86,500	64	-	28,334	-	343	-	134	3,039
AGRICULTURAL RESEARCH SERVICE..........	72,070	65,833	64	-	2,794	-	340	-	-	3,039
COOPERATIVE STATE RESEARCH SERVICE.....	25,750	803	-	-	24,830	-	-	-	117	-
ECONOMIC RESEARCH SERVICE..............	4,660	4,523	-	-	120	-	-	-	17	-
FARMER COOPERATIVE SERVICE.............	203	203	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	15,651	15,091	-	-	557	-	3	-	-	-
STATISTICAL REPORTING SERVICE..........	80	47	-	-	33	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	41,777	35,321	220	-	4,277	35	550	-	1,301	73
MARITIME ADMINISTRATION................	399	39	220	-	140	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	14,496	14,035	-	-	443	-	-	-	-	18
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	26,066	20,493	-	-	3,662	35	520	-	1,301	55
OFFICE OF TELECOMMUNICATIONS...........	470	470	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	346	284	-	-	32	-	30	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	261,545	98,998	35,131	-	119,742	100	5,637	300	-	1,637
DEPARTMENT OF THE ARMY.................	46,509	27,512	2,264	-	13,916	-	1,869	300	-	648
DEPARTMENT OF THE NAVY.................	85,778	27,905	7,229	-	47,894	100	2,519	-	-	131
DEPARTMENT OF THE AIR FORCE............	84,719	42,733	7,860	-	32,783	-	485	-	-	858
DEFENSE AGENCIES.......................	44,539	848	17,778	-	25,149	-	764	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	397,316	67,466	-	-	266,826	704	50,863	214	9,816	1,427
HEALTH SERVICES & MENTAL HEALTH ADMIN..	63,568	23,492	-	-	29,386	-	8,756	-	1,840	94
NATIONAL INSTITUTES OF HEALTH..........	326,500	43,400	-	-	232,417	189	41,356	214	7,591	1,333
OFFICE OF EDUCATION....................	6,815	141	-	-	5,023	515	751	-	385	-
SOCIAL SECURITY ADMINISTRATION.........	433	433	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	52,690	41,218	334	-	5,463	-	579	-	5,024	72
BUREAU OF MINES........................	6,525	5,835	-	-	690	-	-	-	-	-
BUREAU OF RECLAMATION..................	59	27	-	-	32	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,110	3,526	-	-	445	-	176	-	4,963	-
GEOLOGICAL SURVEY......................	31,619	31,456	-	-	163	-	-	-	-	-
NATIONAL PARK SERVICE..................	704	46	-	-	658	-	-	-	-	-
OFFICE OF SALINE WATER.................	2,041	155	125	-	1,402	-	287	-	-	72
OFFICE OF WATER RESOURCES RESEARCH.....	2,632	173	209	-	2,073	-	116	-	61	-
DEPARTMENT OF LABOR, TOTAL.............	2,502	2,072	55	-	138	-	160	-	77	-
BUREAU OF LABOR STATISTICS.............	1,403	1,403	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	547	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	552	122	55	-	138	-	160	-	77	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	341	62	156	-	123	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	134	8	3	-	123	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION........	11	11	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	153	-	153	-	-	-	-	-	-	-
UNITED STATES COAST GUARD..............	43	43	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	276,897	735	999	28,890	73,055	169,894	1,576	1,538	103	107
CIVIL SERVICE COMMISSION...............	136	136	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	6,100	80	-	-	5,560	-	145	-	-	315
NATIONAL AERONAUTICS & SPACE ADMIN.....	680,264	171,544	374,069	337	67,273	59,296	7,212	88	-	445
NATIONAL SCIENCE FOUNDATION............	272,566	13,545	1,230	-	220,323	30,000	4,002	-	2,706	760
OFFICE OF ECONOMIC OPPORTUNITY.........	3,235	287	230	-	1,537	-	1,181	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	406	406	-	-	-	-	-	-	-	-
SMITHSONIAN INSTITUTION................	15,082	13,294	-	-	1,691	-	67	-	30	-
VETERANS ADMINISTRATION................	3,077	2,967	-	-	14	-	96	-	-	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-30. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	
TOTAL, ALL AGENCIES....................	2,395,170	577,864	469,524	30,331	913,436	286,544	79,323	5,508	20,588	12,052
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	137,862	97,179	78	-	33,283	-	160	-	140	7,022
AGRICULTURAL RESEARCH SERVICE..........	84,577	75,272	78	-	2,056	-	149	-	-	7,022
COOPERATIVE STATE RESEARCH SERVICE.....	31,263	956	-	-	30,177	-	-	-	130	-
ECONOMIC RESEARCH SERVICE..............	4,691	4,631	-	-	60	-	-	-	-	-
FARMER COOPERATIVE SERVICE.............	207	207	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	17,043	16,072	-	-	950	-	11	-	10	-
STATISTICAL REPORTING SERVICE..........	81	41	-	-	40	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	52,036	41,822	2,295	-	5,492	-	676	-	1,651	100
MARITIME ADMINISTRATION................	2,796	416	2,295	-	85	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	15,117	14,657	-	-	457	-	-	-	3	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	33,068	25,786	-	-	4,875	-	659	-	1,648	100
OFFICE OF TELECOMMUNICATIONS...........	664	664	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	391	299	-	-	75	-	17	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	264,873	106,884	30,918	-	119,575	125	5,176	510	-	1,685
DEPARTMENT OF THE ARMY.................	48,779	29,534	2,156	-	13,505	25	2,432	510	-	617
DEPARTMENT OF THE NAVY.................	91,398	30,817	7,400	-	51,302	100	1,631	-	-	148
DEPARTMENT OF THE AIR FORCE............	86,296	45,296	7,000	-	32,600	-	500	-	-	900
DEFENSE AGENCIES.......................	38,400	1,237	14,362	-	22,168	-	613	-	-	20
DEPT. OF HEALTH, EDUC. & WELFARE, TOTAL	466,897	76,692	-	-	314,971	227	62,315	259	11,033	1,400
HEALTH SERVICES & MENTAL HEALTH ADMIN..	75,939	30,954	-	-	32,797	-	10,337	-	1,628	223
NATIONAL INSTITUTES OF HEALTH..........	386,100	45,080	-	-	280,324	227	49,878	259	9,155	1,177
OFFICE OF EDUCATION....................	4,350	150	-	-	1,850	-	2,100	-	250	-
SOCIAL SECURITY ADMINISTRATION.........	508	508	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	59,221	48,049	403	-	5,296	-	361	-	5,062	50
BUREAU OF MINES........................	7,858	7,108	-	-	750	-	-	-	-	-
BUREAU OF RECLAMATION..................	104	65	29	-	10	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,317	3,862	-	-	300	-	155	-	5,000	-
GEOLOGICAL SURVEY......................	36,567	36,513	-	-	54	-	-	-	-	-
NATIONAL PARK SERVICE..................	801	142	-	-	659	-	-	-	-	-
OFFICE OF SALINE WATER.................	1,655	155	50	-	1,200	-	200	-	-	50
OFFICE OF WATER RESOURCES RESEARCH.....	2,919	204	324	-	2,323	-	6	-	62	-
DEPARTMENT OF LABOR, TOTAL.............	2,940	2,472	60	-	150	-	174	-	84	-
BUREAU OF LABOR STATISTICS.............	1,484	1,484	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	856	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	600	132	60	-	150	-	174	-	84	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	484	85	240	-	127	32	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	138	8	3	-	127	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION........	12	12	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	269	-	237	-	-	32	-	-	-	-
UNITED STATES COAST GUARD..............	65	65	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	270,284	479	989	28,571	66,668	170,660	1,364	1,421	58	94

AGRICULTURAL RESEARCH SERVICE..........	84,577	75,272	78	-	2,056	-	149	-	-	7,022
COOPERATIVE STATE RESEARCH SERVICE.....	31,263	956	-	-	30,177	-	-	-	130	-
ECONOMIC RESEARCH SERVICE..............	4,691	4,631	-	-	60	-	-	-	-	-
FARMER COOPERATIVE SERVICE.............	207	207	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	17,043	16,072	-	-	950	-	11	-	10	-
STATISTICAL REPORTING SERVICE..........	81	41	-	-	40	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	52,036	41,822	2,295	-	5,492	-	676	-	1,651	100
MARITIME ADMINISTRATION................	2,796	416	2,295	-	85	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	15,117	14,657	-	-	457	-	-	-	3	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	33,068	25,786	-	-	4,875	-	659	-	1,648	100
OFFICE OF TELECOMMUNICATIONS...........	664	664	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	391	299	-	-	75	-	17	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	264,873	106,884	30,918	-	119,575	125	5,176	510	-	1,685
DEPARTMENT OF THE ARMY.................	48,779	29,534	2,156	-	13,505	25	2,432	510	-	617
DEPARTMENT OF THE NAVY.................	91,398	30,817	7,400	-	51,302	100	1,631	-	-	148
DEPARTMENT OF THE AIR FORCE............	86,296	45,296	7,000	-	32,600	-	500	-	-	900
DEFENSE AGENCIES.......................	38,400	1,237	14,362	-	22,168	-	613	-	-	20
DEPT. OF HEALTH, EDUC. & WELFARE, TOTAL	466,897	76,692	-	-	314,971	227	62,315	259	11,033	1,400
HEALTH SERVICES & MENTAL HEALTH ADMIN..	75,939	30,954	-	-	32,797	-	10,337	-	1,628	223
NATIONAL INSTITUTES OF HEALTH..........	386,100	45,080	-	-	280,324	227	49,878	259	9,155	1,177
OFFICE OF EDUCATION....................	4,350	150	-	-	1,850	-	2,100	-	250	-
SOCIAL SECURITY ADMINISTRATION.........	508	508	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	59,221	48,049	403	-	5,296	-	361	-	5,062	50
BUREAU OF MINES........................	7,858	7,108	-	-	750	-	-	-	-	-
BUREAU OF RECLAMATION..................	104	65	29	-	10	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,317	3,862	-	-	300	-	155	-	5,000	-
GEOLOGICAL SURVEY......................	36,567	36,513	-	-	54	-	-	-	-	-
NATIONAL PARK SERVICE..................	801	142	-	-	659	-	-	-	-	-
OFFICE OF SALINE WATER.................	1,655	155	50	-	1,200	-	200	-	-	50
OFFICE OF WATER RESOURCES RESEARCH.....	2,919	204	324	-	2,323	-	6	-	62	-
DEPARTMENT OF LABOR, TOTAL.............	2,940	2,472	60	-	150	-	174	-	84	-
BUREAU OF LABOR STATISTICS.............	1,484	1,484	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	856	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	600	132	60	-	150	-	174	-	84	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	484	85	240	-	127	32	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	138	8	3	-	127	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION........	12	12	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	269	-	237	-	-	32	-	-	-	-
UNITED STATES COAST GUARD..............	65	65	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	270,284	479	989	28,571	66,668	170,640	1,364	1,421	58	94
CIVIL SERVICE COMMISSION...............	117	117	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	8,300	84	-	-	7,453	-	333	-	-	430
NATIONAL AERONAUTICS & SPACE ADMIN.....	750,341	168,095	431,943	535	64,543	80,649	4,558	18	-	-
NATIONAL SCIENCE FOUNDATION............	353,445	15,174	500	1,200	291,875	34,871	2,754	3,300	2,500	1,271
OFFICE OF ECONOMIC OPPORTUNITY.........	6,037	731	2,098	-	1,910	-	1,298	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	410	410	-	-	-	-	-	-	-	-
SMITHSONIAN INSTITUTION................	18,751	16,529	-	25	2,076	-	61	-	60	-
VETERANS ADMINISTRATION................	3,172	3,062	-	-	17	-	93	-	-	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-31. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	
TOTAL, ALL AGENCIES....................	2,604,300	590,325	521,298	30,380	1,024,012	301,323	82,298	11,897	22,687	20,080
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	145,042	96,377	78	-	35,421	-	160	-	189	12,817
AGRICULTURAL RESEARCH SERVICE..........	88,849	73,749	78	-	2,056	-	149	-	-	12,817
COOPERATIVE STATE RESEARCH SERVICE.....	33,164	950	-	-	32,075	-	-	-	139	-
ECONOMIC RESEARCH SERVICE..............	5,051	4,861	-	-	150	-	-	-	40	-
FARMER COOPERATIVE SERVICE.............	207	207	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	17,684	16,563	-	-	1,100	-	11	-	10	-
STATISTICAL REPORTING SERVICE..........	87	47	-	-	40	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	59,423	45,476	777	-	9,880	-	843	-	2,036	411
MARITIME ADMINISTRATION................	1,500	523	777	-	200	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	15,593	15,089	-	-	501	-	-	-	3	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	41,066	28,692	-	-	9,117	-	813	-	2,033	411
OFFICE OF TELECOMMUNICATIONS...........	871	871	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	393	301	-	-	62	-	30	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	278,072	111,498	36,415	-	121,304	230	6,218	500	-	1,907
DEPARTMENT OF THE ARMY.................	51,400	29,162	3,308	-	13,886	130	3,599	500	-	815
DEPARTMENT OF THE NAVY.................	93,797	31,288	8,100	-	52,378	100	1,789	-	-	142
DEPARTMENT OF THE AIR FORCE............	91,975	49,700	7,500	-	33,225	-	600	-	-	950
DEFENSE AGENCIES.......................	40,900	1,348	17,507	-	21,815	-	230	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	522,860	83,757	-	-	350,619	2,324	66,225	6,233	12,308	1,394
HEALTH SERVICES & MENTAL HEALTH ADMIN..	79,584	31,155	-	-	36,444	-	9,935	-	1,833	217
NATIONAL INSTITUTE OF EDUCATION........	22,256	5,256	-	-	6,975	2,075	1,550	5,950	450	-
NATIONAL INSTITUTES OF HEALTH..........	420,100	46,800	-	-	306,950	249	54,616	283	10,025	1,177
OFFICE OF EDUCATION....................	375	1	-	-	250	-	124	-	-	-
SOCIAL SECURITY ADMINISTRATION.........	545	545	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	68,529	55,366	615	-	6,834	-	457	-	5,257	-
BUREAU OF MINES........................	6,790	6,090	-	-	700	-	-	-	-	-
BUREAU OF RECLAMATION..................	83	73	-	-	10	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,551	3,801	-	-	375	-	175	-	5,200	-
GEOLOGICAL SURVEY......................	46,036	44,906	100	-	1,030	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,125	142	-	-	983	-	-	-	-	-
OFFICE OF SALINE WATER.................	2,105	155	200	-	1,500	-	250	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	2,839	199	315	-	2,236	-	32	-	57	-
DEPARTMENT OF LABOR, TOTAL.............	2,671	2,343	42	-	105	-	122	-	59	-
BUREAU OF LABOR STATISTICS.............	1,087	1,087	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	1,164	-	-	-	-	-	-	-	-

DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	145,042	96,377	78	-	35,421	-	160	-	189	12,817
AGRICULTURAL RESEARCH SERVICE..........	88,849	73,749	78	-	2,056	-	149	-	-	12,817
COOPERATIVE STATE RESEARCH SERVICE.....	33,164	950	-	-	32,075	-	-	-	139	-
ECONOMIC RESEARCH SERVICE..............	5,051	4,861	-	-	150	-	-	-	40	-
FARMER COOPERATIVE SERVICE.............	207	207	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	17,684	16,563	-	-	1,100	-	11	-	10	-
STATISTICAL REPORTING SERVICE..........	87	47	-	-	40	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	59,423	45,476	777	-	9,880	-	843	-	2,036	411
MARITIME ADMINISTRATION................	1,500	523	777	-	200	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	15,593	15,089	-	-	501	-	-	-	3	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	41,066	28,692	-	-	9,117	-	813	-	2,033	411
OFFICE OF TELECOMMUNICATIONS...........	871	871	-	-	-	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	393	301	-	-	62	-	30	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	278,072	111,498	36,415	-	121,304	230	6,218	500	-	1,907
DEPARTMENT OF THE ARMY.................	51,400	29,162	3,308	-	13,886	130	3,599	500	-	815
DEPARTMENT OF THE NAVY.................	93,797	31,288	8,100	-	52,378	100	1,789	-	-	142
DEPARTMENT OF THE AIR FORCE............	91,975	49,700	7,500	-	33,225	-	600	-	-	950
DEFENSE AGENCIES.......................	40,900	1,348	17,507	-	21,815	-	230	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	522,860	83,757	-	-	350,619	2,324	66,225	6,233	12,308	1,394
HEALTH SERVICES & MENTAL HEALTH ADMIN..	79,584	31,155	-	-	36,444	-	9,935	-	1,833	217
NATIONAL INSTITUTE OF EDUCATION........	22,256	5,256	-	-	6,975	2,075	1,550	5,950	450	-
NATIONAL INSTITUTES OF HEALTH..........	420,100	46,800	-	-	306,950	249	54,616	283	10,025	1,177
OFFICE OF EDUCATION....................	375	1	-	-	250	-	124	-	-	-
SOCIAL SECURITY ADMINISTRATION.........	545	545	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	68,529	55,366	615	-	6,834	-	457	-	5,257	-
BUREAU OF MINES........................	6,790	6,090	-	-	700	-	-	-	-	-
BUREAU OF RECLAMATION..................	83	73	-	-	10	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,551	3,801	-	-	375	-	175	-	5,200	-
GEOLOGICAL SURVEY......................	46,036	44,906	100	-	1,030	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,125	142	-	-	983	-	-	-	-	-
OFFICE OF SALINE WATER.................	2,105	155	200	-	1,500	-	250	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	2,839	199	315	-	2,236	-	32	-	57	-
DEPARTMENT OF LABOR, TOTAL.............	2,671	2,343	42	-	105	-	122	-	59	-
BUREAU OF LABOR STATISTICS.............	1,087	1,087	-	-	-	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	1,164	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	420	92	42	-	105	-	122	-	59	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	717	94	442	-	130	51	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	211	13	68	-	130	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION........	22	22	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	425	-	374	-	-	51	-	-	-	-
UNITED STATES COAST GUARD..............	59	59	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	282,933	510	1,015	29,220	66,430	182,793	1,346	1,440	58	121
CIVIL SERVICE COMMISSION...............	124	124	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	8,300	88	-	-	7,453	-	329	-	-	430
NATIONAL AERONAUTICS & SPACE ADMIN.....	802,797	159,142	481,434	535	76,792	80,080	4,796	18	-	-
NATIONAL SCIENCE FOUNDATION............	401,735	11,045	280	600	344,095	35,845	444	3,706	2,720	3,000
OFFICE OF ECONOMIC OPPORTUNITY.........	3,317	317	200	-	1,800	-	1,000	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	418	418	-	-	-	-	-	-	-	-
SMITHSONIAN INSTITUTION................	23,982	20,595	-	25	3,124	-	178	-	60	-
VETERANS ADMINISTRATION................	3,380	3,175	-	-	25	-	180	-	-	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-32. FEDERAL OBLIGATIONS FOR BASIC RESEARCH BY DETAILED FIELD OF SCIENCE, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

FIELD OF SCIENCE	ACTUAL, 1971	ESTIMATES	
		1972	1973
TOTAL, ALL FIELDS	2,132,348	2,395,170	2,604,300
LIFE SCIENCES, TOTAL	595,714	738,382	814,160
BIOLOGICAL	450,283	566,883	628,210
CLINICAL MEDICAL	23,586	30,270	31,886
OTHER MEDICAL SCIENCES	77,184	95,085	108,103
LIFE SCIENCES, NEC	44,661	46,144	45,961
PSYCHOLOGY, TOTAL	48,784	57,540	62,006
BIOLOGICAL ASPECTS	25,124	30,914	34,064
SOCIAL ASPECTS	20,580	21,974	21,322
PSYCHOLOGICAL SCIENCES, NEC	3,080	4,652	6,620
PHYSICAL SCIENCES, TOTAL	743,434	769,577	871,582
ASTRONOMY	216,994	201,377	235,982
CHEMISTRY	133,226	183,473	194,891
PHYSICS	386,539	381,331	439,661
PHYSICAL SCIENCES, NEC	6,675	3,396	1,048
ENVIRONMENTAL SCIENCES, TOTAL	392,708	455,553	467,439
ATMOSPHERIC SCIENCES	200,535	227,153	231,625
GEOLOGICAL SCIENCES	132,398	160,429	163,188
OCEANOGRAPHY (EXCLUDING BIOLOGICAL)	57,746	65,937	72,590
ENVIRONMENTAL SCIENCE, NEC	2,029	2,034	36
MATHEMATICS	52,276	60,409	59,690
ENGINEERING, TOTAL	219,665	225,546	208,816
AERONAUTICAL	52,586	43,752	30,351
ASTRONAUTICAL	13,949	12,473	11,006
CHEMICAL	8,697	10,633	12,207
CIVIL	5,818	8,633	9,059
ELECTRICAL	30,874	36,294	31,030
MECHANICAL	36,480	36,505	29,176
METALLURGY & MATERIALS	59,603	62,398	70,869
ENGINEERING, NEC	11,658	14,858	15,118
SOCIAL SCIENCES, TOTAL	69,552	80,566	106,325
ANTHROPOLOGY	8,651	9,262	11,593
ECONOMICS	24,656	27,820	30,062
HISTORY	3,662	4,642	5,103
LINGUISTICS	1,931	2,252	2,519
POLITICAL SCIENCE	2,192	2,462	2,870
SOCIOLOGY	15,551	19,010	17,356
SOCIAL SCIENCES, NEC	12,909	15,118	36,822
OTHER SCIENCES, NEC	10,215	7,597	14,282

TABLE C-33. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES..................	2,132,348	595,714	48,784	743,434	392,708	52,276	219,665	69,552	10,215
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	118,414	78,749	5	16,634	1,713	322	9,536	11,455	-
AGRICULTURAL RESEARCH SERVICE..........	72,070	50,099	5	13,781	298	100	7,090	697	-
COOPERATIVE STATE RESEARCH SERVICE.....	25,750	17,694	-	1,288	161	-	882	5,725	-
ECONOMIC RESEARCH SERVICE..............	4,660	-	-	-	-	-	-	4,660	-
FARMER COOPERATIVE SERVICE.............	203	-	-	-	-	-	-	203	-
FOREST SERVICE.........................	15,651	10,956	-	1,565	1,254	156	1,564	156	-
STATISTICAL REPORTING SERVICE..........	80	-	-	-	-	66	-	14	-
DEPARTMENT OF COMMERCE, TOTAL..........	41,777	8,602	379	12,277	14,336	239	4,311	1,073	560
MARITIME ADMINISTRATION................	399	-	-	-	-	-	399	-	-
NATIONAL BUREAU OF STANDARDS...........	14,496	-	-	11,756	-	41	2,609	-	90
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	26,066	8,602	261	521	14,336	-	1,303	1,043	-
OFFICE OF TELECOMMUNICATIONS...........	470	-	-	-	-	-	-	-	470
SOCIAL AND ECONOMIC STATISTICS ADMIN...	346	-	118	-	-	198	-	30	-
DEPARTMENT OF DEFENSE, TOTAL...........	261,545	28,298	9,658	68,149	56,630	25,606	66,774	1,825	4,605
DEPARTMENT OF THE ARMY.................	46,509	16,472	1,116	11,328	4,722	2,181	9,984	706	-
DEPARTMENT OF THE NAVY.................	85,778	10,002	2,923	25,303	29,633	5,550	12,367	-	-
DEPARTMENT OF THE AIR FORCE............	84,719	1,824	1,427	24,802	22,185	6,008	28,473	-	-
DEFENSE AGENCIES.......................	44,539	-	4,192	6,716	90	11,867	15,950	1,119	4,605
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	397,316	322,071	28,334	19,248	15	1,275	2,451	22,671	1,251
HEALTH SERVICES & MENTAL HEALTH ADMIN..	63,568	22,148	22,805	1,013	-	285	-	17,317	-
NATIONAL INSTITUTES OF HEALTH..........	326,500	299,923	3,545	18,235	15	990	2,451	90	1,251
OFFICE OF EDUCATION....................	6,815	-	1,984	-	-	-	-	4,831	-
SOCIAL SECURITY ADMINISTRATION.........	433	-	-	-	-	-	-	433	-
DEPARTMENT OF THE INTERIOR, TOTAL......	52,690	9,585	-	9,688	28,740	710	2,848	1,075	44
BUREAU OF MINES........................	6,525	-	-	4,005	210	7	2,303	-	-
BUREAU OF RECLAMATION..................	59	12	-	-	-	-	47	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,110	9,110	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	31,619	-	-	3,456	27,535	628	-	-	-
NATIONAL PARK SERVICE..................	704	-	-	-	-	-	-	704	-
OFFICE OF SALINE WATER.................	2,041	-	-	2,041	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	2,632	463	-	186	995	75	498	371	44
DEPARTMENT OF LABOR, TOTAL.............	2,502	-	-	-	-	-	-	2,502	-
BUREAU OF LABOR STATISTICS.............	1,403	-	-	-	-	-	-	1,403	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	-	-	-	-	-	-	547	-
MANPOWER ADMINISTRATION................	552	-	-	-	-	-	-	552	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	341	-	13	32	51	71	174	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	134	-	-	11	-	71	52	-	-
FEDERAL RAILROAD ADMINISTRATION........	11	-	11	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	153	-	2	21	8	-	122	-	-
UNITED STATES COAST GUARD..............	43	-	-	-	43	-	-	-	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	276,897	35,927	-	223,443	-	5,309	12,218	-	-
CIVIL SERVICE COMMISSION...............	136	-	136	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	6,100	3,520	-	2,075	350	-	155	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	680,264	50,069	592	311,537	217,859	1,500	96,994	-	1,713
NATIONAL SCIENCE FOUNDATION............	272,555	50,741	9,303	77,550	71,502	17,236	24,037	20,225	1,972
OFFICE OF ECONOMIC OPPORTUNITY.........	3,235	-	-	-	-	-	-	3,235	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	406	124	4	104	36	8	122	8	-
SMITHSONIAN INSTITUTION................	15,082	5,441	-	2,697	1,476	-	-	5,468	-
VETERANS ADMINISTRATION................	3,077	2,587	360	-	-	-	45	15	70

TABLE C-34. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND FIELD OF SCIENCE. FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	2,395,170	738,382	57,540	769,577	455,553	60,409	225,546	80,566	7,597
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	137,862	93,460	6	18,583	1,863	337	10,234	13,379	-
AGRICULTURAL RESEARCH SERVICE..........	84,577	60,029	6	15,316	322	100	7,458	1,346	-
COOPERATIVE STATE RESEARCH SERVICE.....	31,263	21,501	-	1,563	177	-	1,071	6,951	-
ECONOMIC RESEARCH SERVICE..............	4,691	-	-	-	-	-	-	4,691	-
FARMER COOPERATIVE SERVICE.............	207	-	-	-	-	-	-	207	-
FOREST SERVICE.........................	17,043	11,930	-	1,704	1,364	170	1,705	170	-
STATISTICAL REPORTING SERVICE..........	81	-	-	-	-	67	-	14	-
DEPARTMENT OF COMMERCE, TOTAL..........	52,036	10,912	472	12,962	18,188	269	7,130	1,346	757
MARITIME ADMINISTRATION................	2,796	-	-	-	-	-	2,796	-	-
NATIONAL BUREAU OF STANDARDS...........	15,117	-	-	12,301	-	42	2,681	-	93
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	33,068	10,912	331	661	18,188	-	1,653	1,323	-
OFFICE OF TELECOMMUNICATIONS...........	664	-	-	-	-	-	-	-	664
SOCIAL AND ECONOMIC STATISTICS ADMIN...	391	-	141	-	-	227	-	23	-
DEPARTMENT OF DEFENSE, TOTAL...........	264,873	31,321	10,887	59,186	59,592	28,542	69,371	946	5,028
DEPARTMENT OF THE ARMY.................	48,779	18,577	1,328	10,613	5,617	2,302	9,601	741	-
DEPARTMENT OF THE NAVY.................	91,398	10,874	2,865	27,693	31,252	5,721	12,993	-	-
DEPARTMENT OF THE AIR FORCE............	86,296	1,870	1,444	19,578	22,623	6,105	34,676	-	-
DEFENSE AGENCIES.......................	38,400	-	5,250	1,302	100	14,414	12,101	205	5,028
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	466,897	380,278	33,259	22,680	19	1,550	2,900	24,732	1,479
HEALTH SERVICES & MENTAL HEALTH ADMIN..	75,939	25,607	27,807	1,116	-	380	-	21,029	-
NATIONAL INSTITUTES OF HEALTH..........	386,100	354,671	4,193	21,564	19	1,170	2,900	104	1,479
OFFICE OF EDUCATION....................	4,350	-	1,259	-	-	-	-	3,091	-
SOCIAL SECURITY ADMINISTRATION.........	508	-	-	-	-	-	-	508	-
DEPARTMENT OF THE INTERIOR, TOTAL......	59,221	9,815	-	12,693	33,311	768	1,255	1,331	48
BUREAU OF MINES........................	7,858	-	-	7,136	58	7	657	-	-
BUREAU OF RECLAMATION..................	104	2	-	-	-	-	58	44	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,317	9,317	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	36,567	-	-	3,705	32,181	681	-	-	-
NATIONAL PARK SERVICE..................	801	-	-	-	-	-	-	801	-
OFFICE OF SALINE WATER.................	1,655	-	-	1,655	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	2,919	496	-	197	1,072	80	540	486	48
DEPARTMENT OF LABOR, TOTAL.............	2,940	-	-	-	-	-	-	2,940	-
BUREAU OF LABOR STATISTICS.............	1,484	-	-	-	-	-	-	1,484	-
LABOR-MANAGEMENT SERVICES ADMIN........	856	-	-	-	-	-	-	856	-
MANPOWER ADMINISTRATION................	600	-	-	-	-	-	-	600	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	484	-	15	49	78	73	269	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	138	-	-	11	-	73	54	-	-
FEDERAL RAILROAD ADMINISTRATION........	12	-	12	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	269	-	3	38	13	-	215	-	-
UNITED STATES COAST GUARD..............	65	-	-	-	65	-	-	-	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	270,284	35,525	-	218,478	-	4,800	11,481	-	-
CIVIL SERVICE COMMISSION...............	117	-	117	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	8,300	4,715	-	2,900	475	-	210	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	750,341	98,792	1,183	311,559	257,763	1,138	79,906	-	-
NATIONAL SCIENCE FOUNDATION............	353,445	63,981	11,225	106,923	82,383	22,924	42,621	23,178	210
OFFICE OF ECONOMIC OPPORTUNITY.........	6,037	-	-	-	-	-	-	6,037	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	410	125	5	105	36	8	123	8	-
SMITHSONIAN INSTITUTION................	18,751	6,793	-	3,459	1,845	-	-	6,654	-
VETERANS ADMINISTRATION................	3,172	2,665	371	-	-	-	46	15	75

TABLE C-35. FEDERAL OBLIGATIONS FOR BASIC RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	2,604,300	814,160	62,006	871,582	467,439	59,690	208,816	106,325	14,282
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	145,042	98,387	5	19,122	1,912	288	10,180	15,148	-
AGRICULTURAL RESEARCH SERVICE..........	88,849	63,200	5	15,696	309	97	7,276	2,266	-
COOPERATIVE STATE RESEARCH SERVICE.....	33,164	22,808	-	1,658	188	-	1,136	7,374	-
ECONOMIC RESEARCH SERVICE..............	5,051	-	-	-	-	-	-	5,051	-
FARMER COOPERATIVE SERVICE.............	207	-	-	-	-	-	-	207	-
FOREST SERVICE.........................	17,684	12,379	-	1,768	1,415	177	1,768	177	-
STATISTICAL REPORTING SERVICE..........	87	-	-	-	-	14	-	73	-
DEPARTMENT OF COMMERCE, TOTAL..........	59,423	13,552	552	13,554	22,586	272	6,276	1,666	965
MARITIME ADMINISTRATION................	1,500	-	-	-	-	-	1,500	-	-
NATIONAL BUREAU OF STANDARDS...........	15,593	-	-	12,733	-	43	2,723	-	94
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	41,066	13,552	411	821	22,586	-	2,053	1,643	-
OFFICE OF TELECOMMUNICATIONS...........	871	-	-	-	-	-	-	-	871
SOCIAL AND ECONOMIC STATISTICS ADMIN...	393	-	141	-	-	229	-	23	-
DEPARTMENT OF DEFENSE, TOTAL...........	278,072	32,865	12,395	61,050	60,419	28,563	76,778	1,559	4,443
DEPARTMENT OF THE ARMY.................	51,400	19,736	1,326	10,732	5,008	2,349	10,890	1,359	-
DEPARTMENT OF THE NAVY.................	93,797	11,129	2,934	28,488	31,336	5,889	14,021	-	-
DEPARTMENT OF THE AIR FORCE............	91,975	2,000	1,660	21,160	24,000	6,440	36,715	-	-
DEFENSE AGENCIES.......................	40,900	-	6,475	670	75	13,885	15,152	200	4,443
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	522,860	413,878	33,287	24,645	21	1,682	3,155	44,583	1,609
HEALTH SERVICES & MENTAL HEALTH ADMIN..	79,584	27,978	28,725	1,183	-	409	-	21,289	-
NATIONAL INSTITUTE OF EDUCATION........	22,256	-	-	-	-	-	-	22,256	-
NATIONAL INSTITUTES OF HEALTH..........	420,100	385,900	4,562	23,462	21	1,273	3,155	118	1,609
OFFICE OF EDUCATION....................	375	-	-	-	-	-	-	375	-
SOCIAL SECURITY ADMINISTRATION.........	545	-	-	-	-	-	-	545	-
DEPARTMENT OF THE INTERIOR, TOTAL......	68,529	10,047	-	12,918	42,023	797	1,070	1,626	48
BUREAU OF MINES........................	6,790	-	-	6,255	56	7	472	-	-
BUREAU OF RECLAMATION..................	83	-	-	-	-	-	68	15	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,551	9,551	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	46,036	-	-	4,361	40,965	710	-	-	-
NATIONAL PARK SERVICE..................	1,125	-	-	-	-	-	-	1,125	-
OFFICE OF SALINE WATER.................	2,105	-	-	2,105	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	2.839	496	-	197	1,002	80	530	486	48
DEPARTMENT OF LABOR, TOTAL.............	2,671	-	-	-	-	-	-	2,671	-
BUREAU OF LABOR STATISTICS.............	1,087	-	-	-	-	-	-	1,087	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	-	-	-	-	-	-	1,164	-
MANPOWER ADMINISTRATION................	420	-	-	-	-	-	-	420	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	717	-	26	77	80	112	422	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	211	-	-	17	-	112	82	-	-
FEDERAL RAILROAD ADMINISTRATION........	22	-	22	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	425	-	4	60	21	-	340	-	-
UNITED STATES COAST GUARD..............	59	-	-	-	59	-	-	-	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	282,933	37,065	-	230,035	-	4,650	11,183	-	-
CIVIL SERVICE COMMISSION...............	124	-	124	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	8,300	4,715	-	2,900	475	-	210	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	802,797	117,867	1,302	388,077	249,197	1,024	45,330	-	-
NATIONAL SCIENCE FOUNDATION............	401,735	72,922	13,915	115,253	88,615	22,294	54,038	27,563	7,135
OFFICE OF ECONOMIC OPPORTUNITY.........	3,317	-	-	-	-	-	-	3,317	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	418	128	5	107	37	8	125	8	-
SMITHSONIAN INSTITUTION................	23,982	9,896	-	3,844	2,074	-	-	8,168	-
VETERANS ADMINISTRATION................	3,380	2,838	395	-	-	-	49	16	82

TABLE C-36. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES	48,784	25,124	20,580	3,080	743,434	216,994	133,226	386,539	6,675
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL	5	-	5	-	16,634	-	14,021	2,535	78
AGRICULTURAL RESEARCH SERVICE	5	-	5	-	13,781	-	11,794	1,909	78
COOPERATIVE STATE RESEARCH SERVICE	-	-	-	-	1,288	-	1,288	-	-
FOREST SERVICE	-	-	-	-	1,565	-	939	626	-
DEPARTMENT OF COMMERCE, TOTAL	379	261	118	-	12,277	755	4,205	7,317	-
NATIONAL BUREAU OF STANDARDS	-	-	-	-	11,756	755	3,684	7,317	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	261	261	-	-	521	-	521	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	118	-	118	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	9,658	2,310	6,390	958	68,149	6,286	13,304	41,962	6,597
DEPARTMENT OF THE ARMY	1,116	330	347	439	11,328	-	4,038	6,919	371
DEPARTMENT OF THE NAVY	2,923	855	1,624	444	25,303	2,463	3,671	19,169	-
DEPARTMENT OF THE AIR FORCE	1,427	112	1,315	-	24,802	3,823	5,105	15,874	-
DEFENSE AGENCIES	4,192	1,013	3,104	75	6,716	-	490	-	6,226
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	28,334	14,602	11,610	2,122	19,248	-	19,154	94	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	22,805	13,340	9,465	-	1,013	-	1,013	-	-
NATIONAL INSTITUTES OF HEALTH	3,545	1,262	161	2,122	18,235	-	18,141	94	-
OFFICE OF EDUCATION	1,984	-	1,984	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	-	-	-	-	9,688	-	8,434	1,254	-
BUREAU OF MINES	-	-	-	-	4,005	-	3,385	620	-
GEOLOGICAL SURVEY	-	-	-	-	3,456	-	2,828	628	-
OFFICE OF SALINE WATER	-	-	-	-	2,041	-	2,041	-	-
OFFICE OF WATER RESOURCES RESEARCH	-	-	-	-	186	-	180	6	-
DEPARTMENT OF TRANSPORTATION, TOTAL	13	-	13	-	32	-	-	32	-
FEDERAL HIGHWAY ADMINISTRATION	-	-	-	-	11	-	-	11	-
FEDERAL RAILROAD ADMINISTRATION	11	-	11	-	-	-	-	-	-
OFFICE OF THE SECRETARY	2	-	2	-	21	-	-	21	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION	-	-	-	-	223,443	-	36,735	186,708	-
CIVIL SERVICE COMMISSION	136	-	136	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	-	-	-	-	2,075	-	1,400	675	-
NATIONAL AERONAUTICS & SPACE ADMIN.	592	592	-	-	311,537	184,013	14,275	113,249	-
NATIONAL SCIENCE FOUNDATION	9,303	7,027	2,276	-	77,550	23,236	21,665	32,649	-
OFFICE OF SCIENCE AND TECHNOLOGY	4	2	2	-	104	7	33	64	-
SMITHSONIAN INSTITUTION	-	-	-	-	2,697	2,697	-	-	-
VETERANS ADMINISTRATION	360	330	30	-	-	-	-	-	-

TABLE C-37. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	57,540	30,914	21,974	4,652	769,577	201,377	183,473	381,331	3,396
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	6	-	6	-	18,583	-	15,717	2,687	179
AGRICULTURAL RESEARCH SERVICE..........	6	-	6	-	15,316	-	13,131	2,006	179
COOPERATIVE STATE RESEARCH SERVICE.....	-	-	-	-	1,563	-	1,563	-	-
FOREST SERVICE.........................	-	-	-	-	1,704	-	1,023	681	-
DEPARTMENT OF COMMERCE, TOTAL..........	472	331	141	-	12,962	781	4,652	7,529	-
NATIONAL BUREAU OF STANDARDS...........	-	-	-	-	12,301	781	3,991	7,529	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	331	331	-	-	661	-	661	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	141	-	141	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	10,887	2,586	6,493	1,808	59,186	6,484	12,844	38,641	1,217
DEPARTMENT OF THE ARMY.................	1,328	320	273	735	10,613	-	3,384	7,229	-
DEPARTMENT OF THE NAVY.................	2,865	566	1,899	400	27,693	2,476	3,965	21,252	-
DEPARTMENT OF THE AIR FORCE............	1,444	116	1,328	-	19,578	4,008	5,410	10,160	-
DEFENSE AGENCIES.......................	5,250	1,584	2,993	673	1,302	-	85	-	1,217
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	33,259	17,942	12,707	2,610	22,680	-	22,568	112	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	27,807	16,448	11,359	-	1,116	-	1,116	-	-
NATIONAL INSTITUTES OF HEALTH..........	4,193	1,494	189	2,510	21,564	-	21,452	112	-
OFFICE OF EDUCATION....................	1,259	-	1,159	100	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	-	-	-	-	12,693	-	9,265	3,428	-
BUREAU OF MINES........................	-	-	-	-	7,136	-	4,394	2,742	-
GEOLOGICAL SURVEY......................	-	-	-	-	3,705	-	3,024	681	-
OFFICE OF SALINE WATER.................	-	-	-	-	1,655	-	1,655	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	-	-	-	-	197	-	192	5	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	15	-	15	-	49	-	-	49	-
FEDERAL HIGHWAY ADMINISTRATION.........	-	-	-	-	11	-	-	11	-
FEDERAL RAILROAD ADMINISTRATION........	12	-	12	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	3	-	3	-	38	-	-	38	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	-	-	-	-	218,478	-	34,492	183,986	-
CIVIL SERVICE COMMISSION...............	117	-	117	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	-	-	-	-	2,900	-	2,080	820	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,183	1,183	-	-	311,559	165,152	49,566	96,841	-
NATIONAL SCIENCE FOUNDATION............	11,225	8,530	2,461	234	106,923	25,494	32,256	47,173	2,000
OFFICE OF SCIENCE AND TECHNOLOGY.......	5	2	3	-	105	7	33	65	-
SMITHSONIAN INSTITUTION................	-	-	-	-	3,459	3,459	-	-	-
VETERANS ADMINISTRATION................	371	340	31	-	-	-	-	-	-

TABLE C-38. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHOLOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES	62,006	34,064	21,322	6,620	871,582	235,982	194,891	439,661	1,048
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL	5	-	5	-	19,122	-	16,145	2,651	326
AGRICULTURAL RESEARCH SERVICE	5	-	5	-	15,696	-	13,427	1,943	326
COOPERATIVE STATE RESEARCH SERVICE	-	-	-	-	1,658	-	1,658	-	-
FOREST SERVICE	-	-	-	-	1,768	-	1,060	708	-
DEPARTMENT OF COMMERCE, TOTAL	552	411	141	-	13,554	792	4,921	7,841	-
NATIONAL BUREAU OF STANDARDS	-	-	-	-	12,733	792	4,100	7,841	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	411	411	-	-	821	-	821	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	141	-	141	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	12,395	2,659	6,001	3,735	61,050	6,725	13,402	40,253	670
DEPARTMENT OF THE ARMY	1,326	319	272	735	10,732	-	3,639	7,093	-
DEPARTMENT OF THE NAVY	2,934	600	1,934	400	28,488	2,465	4,013	22,010	-
DEPARTMENT OF THE AIR FORCE	1,660	140	1,520	-	21,160	4,260	5,750	11,150	-
DEFENSE AGENCIES	6,475	1,600	2,275	2,600	670	-	-	-	670
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	33,287	18,917	11,640	2,730	24,645	-	24,523	122	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	28,725	17,291	11,434	-	1,183	-	1,183	-	-
NATIONAL INSTITUTES OF HEALTH	4,562	1,626	206	2,730	23,462	-	23,340	122	-
DEPARTMENT OF THE INTERIOR, TOTAL	-	-	-	-	12,918	-	9,803	3,115	-
BUREAU OF MINES	-	-	-	-	6,255	-	3,855	2,400	-
GEOLOGICAL SURVEY	-	-	-	-	4,361	-	3,651	710	-
OFFICE OF SALINE WATER	-	-	-	-	2,105	-	2,105	-	-
OFFICE OF WATER RESOURCES RESEARCH	-	-	-	-	197	-	192	5	-
DEPARTMENT OF TRANSPORTATION, TOTAL	26	-	26	-	77	-	-	77	-
FEDERAL HIGHWAY ADMINISTRATION	-	-	-	-	17	-	-	17	-
FEDERAL RAILROAD ADMINISTRATION	22	-	22	-	-	-	-	-	-
OFFICE OF THE SECRETARY	4	-	4	-	60	-	-	60	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION	-	-	-	-	230,035	-	32,645	197,390	-
CIVIL SERVICE COMMISSION	124	-	124	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	-	-	-	-	2,900	-	2,080	820	-
NATIONAL AERONAUTICS & SPACE ADMIN.	1,302	1,302	-	-	388,077	192,680	58,290	137,107	-
NATIONAL SCIENCE FOUNDATION	13,915	10,410	3,350	155	115,253	31,934	33,048	50,219	52
OFFICE OF SCIENCE AND TECHNOLOGY	5	3	2	-	107	7	34	66	-
SMITHSONIAN INSTITUTION	-	-	-	-	3,844	3,844	-	-	-
VETERANS ADMINISTRATION	395	362	33	-	-	-	-	-	-

TABLE C-39. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	595,714	450,283	23,586	77,184	44,661	392,708	200,535	132,398	57,746	2,029
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	78,749	77,449	1,165	135	-	1,713	705	1,008	-	-
AGRICULTURAL RESEARCH SERVICE..........	50,099	49,964	-	135	-	298	73	225	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	17,694	16,529	1,165	-	-	161	161	-	-	-
FOREST SERVICE.........................	10,956	10,956	-	-	-	1,254	471	783	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	8,602	8,602	-	-	-	14,336	10,426	2,867	1,043	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	8,602	8,602	-	-	-	14,336	10,426	2,867	1,043	-
DEPARTMENT OF DEFENSE, TOTAL...........	28,298	12,652	15,646	-	-	56,630	27,415	4,901	24,314	-
DEPARTMENT OF THE ARMY.................	16,472	6,232	10,240	-	-	4,722	3,033	1,127	562	-
DEPARTMENT OF THE NAVY.................	10,002	4,596	5,406	-	-	29,633	4,505	1,376	23,752	-
DEPARTMENT OF THE AIR FORCE............	1,824	1,824	-	-	-	22,185	19,877	2,308	-	-
DEFENSE AGENCIES.......................	-	-	-	-	-	90	-	90	-	-
DEPARTMENTWIDE FUNDS...................	-	-	-	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	322,071	199,684	4,905	75,744	41,738	15	-	-	-	15
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	22,148	13,807	4,905	3,436	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	299,923	185,877	-	72,308	41,738	15	-	-	-	15
OFFICE OF CHILD DEVELOPMENT............	-	-	-	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	9,585	9,581	-	-	4	28,740	46	27,641	1,039	14
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	-	-	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	210	-	210	-	-
BUREAU OF RECLAMATION..................	12	12	-	-	-	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,110	9,110	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	27,535	-	26,505	1,030	-
NATIONAL PARK SERVICE..................	-	-	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	463	459	-	-	4	995	46	926	9	14
DEPARTMENT OF JUSTICE, TOTAL...........	-	-	-	-	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	-	-	-	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	-	-	-	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	-	-	-	-	-	51	8	-	43	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	-	-	-	-	-	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	-	-	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	8	8	-	-	-
UNITED STATES COAST GUARD..............	-	-	-	-	-	43	-	-	43	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	35,927	35,927	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	3,520	2,870	-	650	-	350	350	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	50,069	49,579	-	490	-	217,859	132,484	85,113	262	-
NATIONAL SCIENCE FOUNDATION............	50,741	47,822	-	-	2,919	71,502	29,000	9,516	30,986	2,000
OFFICE OF SCIENCE AND TECHNOLOGY.......	124	76	48	-	-	36	11	17	8	-
SMITHSONIAN INSTITUTION................	5,441	5,441	-	-	-	1,476	90	1,335	51	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	2,587	600	1,822	165	-	-	-	-	-	-

TABLE C-40. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	738,382	566,883	30,270	95,085	46,144	455,553	227,153	160,429	65,937	2,034
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	93,460	91,734	1,414	312	-	1,863	768	1,095	-	-
AGRICULTURAL RESEARCH SERVICE..........	60,029	59,717	-	312	-	322	79	243	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	21,501	20,087	1,414	-	-	177	177	-	-	-
FOREST SERVICE.........................	11,930	11,930	-	-	-	1,364	512	852	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	10,912	10,912	-	-	-	18,188	13,227	3,637	1,324	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	10,912	10,912	-	-	-	18,188	13,227	3,637	1,324	-
DEPARTMENT OF DEFENSE, TOTAL...........	31,321	12,796	18,525	-	-	59,592	28,738	5,024	25,830	-
DEPARTMENT OF THE ARMY.................	18,577	5,652	12,925	-	-	5,617	3,589	1,265	763	-
DEPARTMENT OF THE NAVY.................	10,874	5,274	5,600	-	-	31,252	4,602	1,583	25,067	-
DEPARTMENT OF THE AIR FORCE............	1,870	1,870	-	-	-	22,623	20,547	2,076	-	-
DEFENSE AGENCIES.......................	-	-	-	-	-	100	-	100	-	-
DEPARTMENTWIDE FUNDS...................	-	-	-	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	380,278	237,008	8,405	92,212	42,653	19	-	-	-	19
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	25,607	17,202	8,405	-	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	354,671	219,806	-	92,212	42,653	19	-	-	-	19
OFFICE OF CHILD DEVELOPMENT............	-	-	-	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	9,815	9,812	-	-	3	33,311	52	31,251	1,993	15
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	-	-	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	58	-	58	-	-
BUREAU OF RECLAMATION..................	2	2	-	-	-	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,317	9,317	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	32,181	-	30,198	1,983	-
NATIONAL PARK SERVICE..................	-	-	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	496	493	-	-	3	1,072	52	995	10	15
DEPARTMENT OF JUSTICE, TOTAL...........	-	-	-	-	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	-	-	-	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	-	-	-	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	-	-	-	-	-	78	13	-	65	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	-	-	-	-	-	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	-	-	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	13	13	-	-	-
UNITED STATES COAST GUARD..............	-	-	-	-	-	65	-	-	65	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	35,525	35,525	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	4,715	3,990	-	725	-	475	325	-	150	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	98,792	97,126	-	1,666	-	257,763	150,727	106,891	145	-
NATIONAL SCIENCE FOUNDATION............	63,981	60,493	-	-	3,488	82,383	33,202	10,819	36,362	2,000
OFFICE OF SCIENCE AND TECHNOLOGY.......	125	76	49	-	-	36	11	17	8	-
SMITHSONIAN INSTITUTION................	6,793	6,793	-	-	-	1,845	90	1,695	60	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	2,665	618	1,877	170	-	-	-	-	-	-

TABLE C-41. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	814,160	628,210	31,886	108,103	45,961	467,439	231,625	163,188	72,590	36
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	98,387	96,318	1,500	569	-	1,912	794	1,118	-	-
AGRICULTURAL RESEARCH SERVICE..........	63,200	62,631	-	569	-	309	75	234	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	22,808	21,308	1,500	-	-	188	188	-	-	-
FOREST SERVICE.........................	12,379	12,379	-	-	-	1,415	531	884	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	13,552	13,552	-	-	-	22,586	16,425	4,517	1,644	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	13,552	13,552	-	-	-	22,586	16,425	4,517	1,644	-
DEPARTMENT OF DEFENSE, TOTAL...........	32,865	13,358	19,507	-	-	60,419	29,450	5,705	25,264	-
DEPARTMENT OF THE ARMY.................	19,736	5,993	13,743	-	-	5,008	3,383	1,625	-	-
DEPARTMENT OF THE NAVY.................	11,129	5,365	5,764	-	-	31,336	4,527	1,545	25,264	-
DEPARTMENT OF THE AIR FORCE............	2,000	2,000	-	-	-	24,000	21,540	2,460	-	-
DEFENSE AGENCIES.......................	-	-	-	-	-	75	-	75	-	-
DEPARTMENTWIDE FUNDS...................	-	-	-	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	413,878	258,311	8,830	104,616	42,121	21	-	-	-	21
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	27,978	19,148	8,830	-	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	385,900	239,163	-	104,616	42,121	21	-	-	-	21
OFFICE OF CHILD DEVELOPMENT............	-	-	-	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	10,047	10,044	-	-	3	42,023	52	38,348	3,608	15
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	-	-	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	56	-	56	-	-
BUREAU OF RECLAMATION..................	-	-	-	-	-	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	9,551	9,551	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	40,965	-	37,367	3,598	-
NATIONAL PARK SERVICE..................	-	-	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	496	493	-	-	3	1,002	52	925	10	15
DEPARTMENT OF JUSTICE, TOTAL...........	-	-	-	-	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	-	-	-	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	-	-	-	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	-	-	-	-	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	-	-	-	-	-	80	21	-	59	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	-	-	-	-	-	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	-	-	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	21	21	-	-	-
UNITED STATES COAST GUARD..............	-	-	-	-	-	59	-	-	59	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	37,065	37,065	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	4,715	3,990	-	725	-	475	325	-	150	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	117,867	115,855	-	2,012	-	249,197	150,421	98,553	223	-
NATIONAL SCIENCE FOUNDATION............	72,922	69,085	-	-	3,837	88,615	34,035	13,010	41,570	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	128	78	50	-	-	37	12	17	8	-
SMITHSONIAN INSTITUTION................	9,896	9,896	-	-	-	2,074	90	1,920	64	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	2,838	658	1,999	181	-	-	-	-	-	-

TABLE C-42. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	219,665	52,586	13,949	8,697	5,818	30,874	36,480	59,603	11,658
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	9,536	-	-	1,793	1,171	19	474	-	6,079
AGRICULTURAL RESEARCH SERVICE..........	7,090	-	-	1,637	858	19	318	-	4,258
COOPERATIVE STATE RESEARCH SERVICE.....	882	-	-	-	-	-	-	-	882
FOREST SERVICE.........................	1,564	-	-	156	313	-	156	-	939
DEPARTMENT OF COMMERCE, TOTAL..........	4,311	-	-	-	194	1,142	894	1,796	285
MARITIME ADMINISTRATION................	399	-	-	-	194	205	-	-	-
NATIONAL BUREAU OF STANDARDS...........	2,609	-	-	-	-	155	373	1,796	285
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,303	-	-	-	-	782	521	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	66,774	2,261	6,535	1,520	721	13,759	13,687	28,241	50
DEPARTMENT OF THE ARMY.................	9,984	1,238	-	389	721	3,817	1,483	2,286	50
DEPARTMENT OF THE NAVY.................	12,367	1,023	-	1,131	-	-	3,164	7,049	-
DEPARTMENT OF THE AIR FORCE............	28,473	-	6,535	-	-	8,925	9,040	3,973	-
DEFENSE AGENCIES.......................	15,950	-	-	-	-	1,017	-	14,933	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	2,451	-	-	-	-	-	-	-	2,451
NATIONAL INSTITUTES OF HEALTH..........	2,451	-	-	-	-	-	-	-	2,451
DEPARTMENT OF THE INTERIOR, TOTAL......	2,848	-	-	93	283	30	21	2,248	173
BUREAU OF MINES........................	2,303	-	-	59	-	-	-	2,244	-
BUREAU OF RECLAMATION..................	47	-	-	-	27	20	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	498	-	-	34	256	10	21	4	173
DEPARTMENT OF TRANSPORTATION, TOTAL....	174	-	-	-	40	127	7	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	52	-	-	-	40	5	7	-	-
OFFICE OF THE SECRETARY................	122	-	-	-	-	122	-	-	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	12,218	-	-	225	-	-	-	11,993	-
ENVIRONMENTAL PROTECTION AGENCY........	155	-	75	-	-	-	80	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	96,994	49,143	7,321	857	-	10,985	17,646	10,613	429
NATIONAL SCIENCE FOUNDATION............	24,037	1,164	-	4,191	3,392	4,795	3,654	4,695	2,146
OFFICE OF SCIENCE AND TECHNOLOGY.......	122	18	18	18	17	17	17	17	-
VETERANS ADMINISTRATION................	45	-	-	-	-	-	-	-	45

TABLE C-43. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	225,546	43,752	12,473	10,633	8,633	36,294	36,505	62,398	14,858
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	10,234	-	-	1,872	1,265	20	493	-	6,584
AGRICULTURAL RESEARCH SERVICE..........	7,458	-	-	1,702	923	20	323	-	4,490
COOPERATIVE STATE RESEARCH SERVICE.....	1,071	-	-	-	-	-	-	-	1,071
FOREST SERVICE.........................	1,705	-	-	170	342	-	170	-	1,023
DEPARTMENT OF COMMERCE, TOTAL..........	7,130	-	-	-	2,796	1,153	1,048	1,837	296
MARITIME ADMINISTRATION................	2,796	-	-	-	2,796	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	2,681	-	-	-	-	161	387	1,837	296
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,653	-	-	-	-	992	661	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	69,371	1,799	7,145	1,461	440	14,787	13,458	30,281	-
DEPARTMENT OF THE ARMY.................	9,601	721	-	247	440	3,972	1,724	2,497	-
DEPARTMENT OF THE NAVY.................	12,993	1,078	-	1,214	-	-	3,176	7,525	-
DEPARTMENT OF THE AIR FORCE............	34,676	-	7,145	-	-	9,485	8,558	9,488	-
DEFENSE AGENCIES.......................	12,101	-	-	-	-	1,330	-	10,771	-
DEPT. OF HEALTH, EDUC. & WELFARE, TOTAL	2,900	-	-	-	-	-	-	-	2,900
NATIONAL INSTITUTES OF HEALTH..........	2,900	-	-	-	-	-	-	-	2,900
DEPARTMENT OF THE INTERIOR, TOTAL......	1,255	-	-	97	386	64	30	502	176
BUREAU OF MINES........................	657	-	-	58	101	-	-	498	-
BUREAU OF RECLAMATION..................	58	-	-	-	13	45	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	540	-	-	39	272	19	30	4	176
DEPARTMENT OF TRANSPORTATION, TOTAL....	269	-	-	-	41	221	7	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	54	-	-	-	41	6	7	-	-
OFFICE OF THE SECRETARY................	215	-	-	-	-	215	-	-	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	11,481	-	-	217	-	-	-	11,264	-
ENVIRONMENTAL PROTECTION AGENCY........	210	-	80	60	-	-	70	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	79,906	39,817	5,230	651	-	9,886	15,497	8,325	-
NATIONAL SCIENCE FOUNDATION............	42,621	2,118	-	6,257	3,687	10,146	5,885	9,672	4,856
OFFICE OF SCIENCE AND TECHNOLOGY.......	123	18	18	18	18	17	17	17	-
VETERANS ADMINISTRATION................	46	-	-	-	-	-	-	-	46

TABLE C-44. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	208,816	30,351	11,006	12,207	9,059	31,030	29,176	70,869	15,118
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	10,180	-	-	1,853	1,246	19	491	-	6,571
AGRICULTURAL RESEARCH SERVICE..........	7,276	-	-	1,676	892	19	314	-	4,375
COOPERATIVE STATE RESEARCH SERVICE.....	1,136	-	-	-	-	-	-	-	1,136
FOREST SERVICE.........................	1,768	-	-	177	354	-	177	-	1,060
DEPARTMENT OF COMMERCE, TOTAL..........	6,276	-	-	-	1,500	1,396	1,214	1,865	301
MARITIME ADMINISTRATION................	1,500	-	-	-	1,500	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	2,723	-	-	-	-	164	393	1,865	301
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	2,053	-	-	-	-	1,232	821	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	76,778	1,771	7,285	1,691	261	14,674	14,469	36,627	-
DEPARTMENT OF THE ARMY.................	10,890	591	-	305	261	3,979	1,630	4,124	-
DEPARTMENT OF THE NAVY.................	14,021	1,180	-	1,386	-	-	3,209	8,246	-
DEPARTMENT OF THE AIR FORCE............	36,715	-	7,285	-	-	9,550	9,630	10,250	-
DEFENSE AGENCIES.......................	15,152	-	-	-	-	1,145	-	14,007	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	3,155	-	-	-	-	-	-	-	3,155
NATIONAL INSTITUTES OF HEALTH..........	3,155	-	-	-	-	-	-	-	3,155
DEPARTMENT OF THE INTERIOR, TOTAL......	1,070	-	-	95	374	74	30	321	176
BUREAU OF MINES........................	472	-	-	56	99	-	-	317	-
BUREAU OF RECLAMATION..................	68	-	-	-	13	55	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	530	-	-	39	262	19	30	4	176
DEPARTMENT OF TRANSPORTATION, TOTAL....	422	-	-	-	63	348	11	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	82	-	-	-	63	8	11	-	-
OFFICE OF THE SECRETARY................	340	-	-	-	-	340	-	-	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	11,183	-	-	203	-	-	-	10,980	-
ENVIRONMENTAL PROTECTION AGENCY........	210	-	80	60	-	-	70	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	45,330	26,210	3,623	585	-	3,373	5,171	6,368	-
NATIONAL SCIENCE FOUNDATION............	54,038	2,352	-	7,702	5,597	11,128	7,702	14,691	4,866
OFFICE OF SCIENCE AND TECHNOLOGY.......	125	18	18	18	18	18	18	17	-
VETERANS ADMINISTRATION................	49	-	-	-	-	-	-	-	49

TABLE C-45. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES.....................	69,552	8,651	24,656	3,662	1,931	2,192	15,551	12,909
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	11,455	-	10,705	91	-	29	545	85
AGRICULTURAL RESEARCH SERVICE..........	697	-	680	-	-	-	8	9
COOPERATIVE STATE RESEARCH SERVICE.....	5,725	-	5,422	-	-	-	303	-
ECONOMIC RESEARCH SERVICE..............	4,660	-	4,230	91	-	29	234	76
FARMER COOPERATIVE SERVICE.............	203	-	203	-	-	-	-	-
FOREST SERVICE.........................	156	-	156	-	-	-	-	-
STATISTICAL REPORTING SERVICE..........	14	-	14	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	1,073	-	1,073	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,043	-	1,043	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	30	-	30	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,825	148	100	-	366	853	358	-
DEPARTMENT OF THE ARMY.................	706	148	100	-	-	100	358	-
DEFENSE AGENCIES.......................	1,119	-	-	-	366	753	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	22,671	1,168	4,933	-	1,428	550	9,438	5,154
HEALTH SERVICES & MENTAL HEALTH ADMIN..	17,317	1,168	4,933	-	1,253	525	9,438	-
NATIONAL INSTITUTES OF HEALTH..........	90	-	-	-	-	-	-	90
OFFICE OF EDUCATION....................	4,831	-	-	-	175	25	-	4,631
SOCIAL SECURITY ADMINISTRATION.........	433	-	-	-	-	-	-	433
DEPARTMENT OF THE INTERIOR, TOTAL......	1,075	704	226	-	-	51	51	43
NATIONAL PARK SERVICE..................	704	704	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	371	-	226	-	-	51	51	43
DEPARTMENT OF LABOR, TOTAL.............	2,502	-	2,502	-	-	-	-	-
BUREAU OF LABOR STATISTICS.............	1,403	-	1,403	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	547	-	547	-	-	-	-	-
MANPOWER ADMINISTRATION................	552	-	552	-	-	-	-	-
OTHER AGENCIES								
NATIONAL SCIENCE FOUNDATION............	20,225	3,999	4,443	733	137	706	2,581	7,626
OFFICE OF ECONOMIC OPPORTUNITY.........	3,235	-	673	-	-	-	2,562	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	8	1	1	1	-	3	1	1
SMITHSONIAN INSTITUTION................	5,468	2,631	-	2,837	-	-	-	-
VETERANS ADMINISTRATION................	15	-	-	-	-	-	15	-

TABLE C-46. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES	80,566	9,262	27,820	4,642	2,252	2,462	19,010	15,118
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL	13,379	-	12,560	91	-	29	612	87
AGRICULTURAL RESEARCH SERVICE	1,346	-	1,328	-	-	-	8	10
COOPERATIVE STATE RESEARCH SERVICE	6,951	-	6,583	-	-	-	368	-
ECONOMIC RESEARCH SERVICE	4,691	-	4,258	91	-	29	236	77
FARMER COOPERATIVE SERVICE	207	-	207	-	-	-	-	-
FOREST SERVICE	170	-	170	-	-	-	-	-
STATISTICAL REPORTING SERVICE	14	-	14	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	1,346	-	1,346	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,323	-	1,323	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	23	-	23	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	946	-	-	-	305	400	241	-
DEPARTMENT OF THE ARMY	741	-	-	-	100	400	241	-
DEFENSE AGENCIES	205	-	-	-	205	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	24,732	1,651	5,553	-	1,940	911	11,224	3,453
HEALTH SERVICES & MENTAL HEALTH ADMIN.	21,029	1,651	5,553	-	1,790	811	11,224	-
NATIONAL INSTITUTES OF HEALTH	104	-	-	-	-	-	-	104
OFFICE OF EDUCATION	3,091	-	-	-	150	100	-	2,841
SOCIAL SECURITY ADMINISTRATION	508	-	-	-	-	-	-	508
DEPARTMENT OF THE INTERIOR, TOTAL	1,331	801	320	5	-	69	70	66
BUREAU OF RECLAMATION	44	-	44	-	-	-	-	-
NATIONAL PARK SERVICE	801	801	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH	486	-	276	5	-	69	70	66
DEPARTMENT OF LABOR, TOTAL	2,940	-	2,940	-	-	-	-	-
BUREAU OF LABOR STATISTICS	1,484	-	1,484	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN.	856	-	856	-	-	-	-	-
MANPOWER ADMINISTRATION	600	-	600	-	-	-	-	-
OTHER AGENCIES								
NATIONAL SCIENCE FOUNDATION	23,178	3,800	4,400	900	7	1,050	1,510	11,511
OFFICE OF ECONOMIC OPPORTUNITY	6,037	-	700	-	-	-	5,337	-
OFFICE OF SCIENCE AND TECHNOLOGY	8	1	1	1	-	3	1	1
SMITHSONIAN INSTITUTION	6,654	3,009	-	3,645	-	-	-	-
VETERANS ADMINISTRATION	15	-	-	-	-	-	15	-

TABLE C-47. FEDERAL OBLIGATIONS FOR BASIC RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	106,325	11,593	30,062	5,103	2,519	2,870	17,356	36,822
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	15,148	-	14,273	98	-	31	653	93
AGRICULTURAL RESEARCH SERVICE..........	2,266	-	2,248	-	-	-	8	10
COOPERATIVE STATE RESEARCH SERVICE.....	7,374	-	6,983	-	-	-	391	-
ECONOMIC RESEARCH SERVICE..............	5,051	-	4,585	98	-	31	254	83
FARMER COOPERATIVE SERVICE.............	207	-	207	-	-	-	-	-
FOREST SERVICE.........................	177	-	177	-	-	-	-	-
STATISTICAL REPORTING SERVICE..........	73	-	73	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	1,666	-	1,666	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	1,643	-	1,643	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	23	-	23	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,559	374	-	-	200	542	443	-
DEPARTMENT OF THE ARMY.................	1,359	374	-	-	-	542	443	-
DEFENSE AGENCIES.......................	200	-	-	-	200	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	44,583	1,874	5,000	-	2,319	1,025	11,446	22,919
HEALTH SERVICES & MENTAL HEALTH ADMIN..	21,289	1,874	5,000	-	2,069	900	11,446	-
NATIONAL INSTITUTE OF EDUCATION........	22,256	-	-	-	-	-	-	22,256
NATIONAL INSTITUTES OF HEALTH..........	118	-	-	-	-	-	-	118
OFFICE OF EDUCATION....................	375	-	-	-	250	125	-	-
SOCIAL SECURITY ADMINISTRATION.........	545	-	-	-	-	-	-	545
DEPARTMENT OF THE INTERIOR, TOTAL......	1,626	1,125	291	5	-	69	70	66
BUREAU OF RECLAMATION..................	15	-	15	-	-	-	-	-
NATIONAL PARK SERVICE..................	1,125	1,125	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	486	-	276	5	-	69	70	66
DEPARTMENT OF LABOR, TOTAL.............	2,671	-	2,671	-	-	-	-	-
BUREAU OF LABOR STATISTICS.............	1,087	-	1,087	-	-	-	-	-
LABOR-MANAGEMENT SERVICES ADMIN........	1,164	-	1,164	-	-	-	-	-
MANPOWER ADMINISTRATION................	420	-	420	-	-	-	-	-
OTHER AGENCIES								
NATIONAL SCIENCE FOUNDATION............	27,563	4,150	5,760	900	-	1,200	1,810	13,743
OFFICE OF ECONOMIC OPPORTUNITY.........	3,317	-	400	-	-	-	2,917	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	8	1	1	1	-	3	1	1
SMITHSONIAN INSTITUTION................	8,168	4,069	-	4,099	-	-	-	-
VETERANS ADMINISTRATION................	16	-	-	-	-	-	16	-

TABLE C-48. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	
TOTAL, ALL AGENCIES....................	4,017,859	1,498,532	1,214,420	46,448	701,306	138,877	241,878	50,233	81,332	44,833
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	173,738	128,331	376	-	43,411	-	440	-	229	951
AGRICULTURAL RESEARCH SERVICE..........	89,776	86,054	188	-	2,222	-	361	-	-	951
COOPERATIVE STATE RESEARCH SERVICE.....	42,012	1,309	-	-	40,513	-	-	-	190	-
ECONOMIC RESEARCH SERVICE..............	10,874	10,583	-	-	260	-	-	-	31	-
FARMER COOPERATIVE SERVICE.............	814	717	-	-	97	-	-	-	-	-
FOREST SERVICE.........................	29,460	29,195	6	-	186	-	65	-	8	-
NATIONAL AGRICULTURAL LIBRARY..........	391	183	94	-	100	-	14	-	-	-
STATISTICAL REPORTING SERVICE..........	411	290	88	-	33	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	71,897	43,805	12,511	-	10,560	-	872	-	3,368	781
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	635	86	-	528	-	477	-	-	-
MARITIME ADMINISTRATION................	12,806	1,457	10,721	-	378	-	-	-	-	250
NATIONAL BUREAU OF STANDARDS...........	14,159	13,485	124	-	8	-	-	-	11	531
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	39,495	24,517	1,580	-	9,646	-	395	-	3,357	-
OFFICE OF TELECOMMUNICATIONS...........	1,637	1,637	-	-	-	-	-	-	-	-
PATENT OFFICE..........................	412	412	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,662	1,662	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,351,410	515,450	662,515	2,568	76,083	28,732	33,033	31,076	15	1,938
DEPARTMENT OF THE ARMY.................	292,617	196,112	72,694	-	9,421	115	6,498	7,310	15	452
DEPARTMENT OF THE NAVY.................	187,372	127,911	29,347	-	14,917	12,418	2,779	-	-	-
DEPARTMENT OF THE AIR FORCE............	592,467	104,076	442,578	-	31,829	250	13,104	-	-	630
DEFENSE AGENCIES.......................	275,927	86,998	117,134	2,258	19,475	15,909	9,796	23,501	-	856
DEPARTMENTWIDE FUNDS...................	3,027	353	762	310	441	40	856	265	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	905,014	210,701	37,898	-	431,352	4,221	138,372	3,131	46,342	32,997
FOOD AND DRUG ADMINISTRATION...........	25,643	16,438	1,038	-	6,646	-	709	-	196	616
HEALTH SERVICES & MENTAL HEALTH ADMIN..	115,589	30,557	551	-	36,020	-	17,339	-	16,243	14,879
NATIONAL INSTITUTES OF HEALTH..........	657,400	151,913	35,771	-	345,393	34	97,085	894	12,478	13,832
OFFICE OF CHILD DEVELOPMENT............	7,852	235	236	-	4,711	-	2,356	-	314	-
OFFICE OF EDUCATION....................	55,958	1,370	126	-	22,848	4,187	12,621	2,237	12,569	-
SOCIAL AND REHABILITATION SERVICE......	32,072	308	-	-	15,348	-	8,229	-	4,517	3,670
SOCIAL SECURITY ADMINISTRATION.........	10,500	9,880	176	-	386	-	33	-	25	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	10,496	2,629	4,873	-	665	550	823	-	956	-
DEPARTMENT OF THE INTERIOR, TOTAL......	86,381	53,213	11,279	285	14,837	-	1,441	-	5,326	-
BONNEVILLE POWER ADMINISTRATION........	341	124	137	-	80	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	755	407	-	-	308	-	-	-	40	-
BUREAU OF MINES........................	32,214	28,631	1,695	-	1,618	-	270	-	-	-
BUREAU OF OUTDOOR RECREATION...........	185	85	-	-	25	-	75	-	-	-
BUREAU OF RECLAMATION..................	9,078	3,444	1,303	-	3,774	-	-	-	557	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	11,884	7,508	-	-	90	-	-	-	4,286	-
GEOLOGICAL SURVEY......................	12,527	11,456	303	-	635	-	-	-	133	-
NATIONAL PARK SERVICE..................	437	437	-	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH................	4,955	149	3,861	-	391	-	554	-	-	-
OFFICE OF SALINE WATER.................	4,069	305	3,204	285	163	-	112	-	-	-
OFFICE OF THE SECRETARY................	153	25	-	-	50	-	-	-	78	-
OFFICE OF WATER RESOURCES RESEARCH.....	9,783	642	776	-	7,703	-	430	-	232	-
DEPARTMENT OF JUSTICE, TOTAL...........	6,525	492	779	-	2,500	-	2,069	-	685	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,495	184	506	-	595	-	210	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	5,030	308	273	-	1,905	-	1,859	-	685	-

CONTINUED ON NEXT PAGE

TABLE C-48. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRAMURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NONPROFIT INSTITUTIONS	FFRDCS ADMIN. BY NONPROFIT INSTITUTIONS	OTHER	
DEPARTMENT OF LABOR, TOTAL	11,120	4,981	768	-	1,990	-	2,306	-	1,075	-
BUREAU OF LABOR STATISTICS	1,450	1,450	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION	1,501	1,431	-	-	70	-	-	-	-	-
MANPOWER ADMINISTRATION	7,681	1,690	768	-	1,920	-	2,228	-	1,075	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN.	326	326	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	162	84	-	-	-	-	78	-	-	-
DEPARTMENT OF STATE, TOTAL	28,975	6,158	-	-	13,907	-	3,554	38	110	5,208
DEPARTMENTAL FUNDS	350	104	-	-	54	-	44	38	110	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	28,625	6,054	-	-	13,853	-	3,510	-	-	5,208
DEPARTMENT OF TRANSPORTATION, TOTAL	172,838	53,224	88,920	2	8,010	250	1,719	3,246	17,463	4
FEDERAL AVIATION ADMINISTRATION	93,492	25,980	67,121	-	391	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION	23,734	3,797	3,800	-	1,018	100	475	16	14,528	-
FEDERAL RAILROAD ADMINISTRATION	17,939	9,666	6,771	-	639	-	-	863	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	14,702	6,175	4,786	-	2,030	-	1,147	123	441	-
OFFICE OF THE SECRETARY	8,540	2,594	4,279	2	1,202	150	-	313	-	-
UNITED STATES COAST GUARD	4,706	2,386	2,114	-	202	-	-	-	-	4
URBAN MASS TRANSPORTATION ADMIN.	9,725	2,626	49	-	2,528	-	97	1,931	2,494	-
DEPARTMENT OF THE TREASURY, TOTAL	383	383	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING	383	383	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION	103	31	60	-	-	-	12	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	544	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION	2,980	-	-	-	113	-	-	-	2,867	-
ATOMIC ENERGY COMMISSION	152,094	4,174	1,978	40,669	16,594	74,830	2,962	10,418	-	469
CIVIL AERONAUTICS BOARD	277	277	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION	233	233	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	47,718	19,481	12,464	-	10,574	-	950	230	2,686	1,333
FEDERAL COMMUNICATIONS COMMISSION	616	616	-	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD	395	395	-	-	-	-	-	-	-	-
FEDERAL TRADE COMMISSION	440	440	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION	93	55	-	-	-	-	38	-	-	-
LIBRARY OF CONGRESS	982	962	20	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.	816,686	375,457	368,074	365	29,162	28,877	13,574	25	-	1,152
NATIONAL SCIENCE FOUNDATION	45,720	3,727	2,300	2,559	33,328	1,417	1,777	581	31	-
OFFICE OF ECONOMIC OPPORTUNITY	59,877	5,638	8,414	-	7,403	-	37,205	1,217	-	-
OFFICE OF EMERGENCY PREPAREDNESS	577	272	230	-	-	-	75	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY	609	609	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY	177	50	-	-	-	-	127	-	-	-
POSTAL SERVICE	1,012	335	383	-	23	-	-	271	-	-
TENNESSEE VALLEY AUTHORITY	7,455	7,324	-	-	131	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY	1,354	540	401	-	40	-	373	-	-	-
UNITED STATES INFORMATION AGENCY	108	108	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION	59,032	57,897	177	-	623	-	156	-	179	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-49. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRAMURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NONPROFIT INSTITUTIONS	FFRDCS ADMIN. BY NONPROFIT INSTITUTIONS	OTHER	
TOTAL, ALL AGENCIES	4,354,278	1,594,053	1,235,709	45,911	843,956	155,436	281,170	46,731	101,205	50,107
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	196,705	142,034	866	-	51,201	-	195	-	213	2,196
AGRICULTURAL RESEARCH SERVICE	101,173	97,132	151	-	1,504	-	190	-	-	2,196
COOPERATIVE STATE RESEARCH SERVICE	51,009	1,560	-	-	49,236	-	-	-	213	-
ECONOMIC RESEARCH SERVICE	10,947	10,807	-	-	140	-	-	-	-	-
FARMER COOPERATIVE SERVICE	827	827	-	-	-	-	-	-	-	-
FOREST SERVICE	32,080	31,281	575	-	224	-	-	-	-	-
NATIONAL AGRICULTURAL LIBRARY	249	187	-	-	57	-	5	-	-	-
STATISTICAL REPORTING SERVICE	420	240	140	-	40	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	91,908	51,916	19,974	-	13,321	-	2,670	-	3,528	499
ECONOMIC DEVELOPMENT ADMINISTRATION	1,284	586	100	-	433	-	165	-	-	-
MARITIME ADMINISTRATION	20,099	2,104	17,715	-	230	-	-	-	-	50
NATIONAL BUREAU OF STANDARDS	15,764	15,139	155	-	-	-	-	-	21	449
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	50,104	29,430	2,004	-	12,658	-	2,505	-	3,507	-
OFFICE OF TELECOMMUNICATIONS	3,110	3,110	-	-	-	-	-	-	-	-
PATENT OFFICE	290	290	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	1,257	1,257	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	1,428,555	546,533	697,938	3,982	74,207	33,148	44,353	26,495	152	1,747
DEPARTMENT OF THE ARMY	267,246	195,865	49,065	-	10,499	135	6,738	4,427	152	365
DEPARTMENT OF THE NAVY	220,366	147,329	45,515	-	9,079	14,351	4,092	-	-	-
DEPARTMENT OF THE AIR FORCE	608,726	113,160	452,102	-	30,109	290	12,565	-	-	500
DEFENSE AGENCIES	328,517	89,792	150,091	3,682	24,178	18,372	19,822	21,698	-	882
DEPARTMENTWIDE FUNDS	3,700	387	1,165	300	342	-	1,136	370	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,047,098	230,785	48,660	-	506,575	3,640	159,059	3,631	57,141	37,607
FOOD AND DRUG ADMINISTRATION	37,762	23,239	1,230	-	6,025	-	1,307	-	519	5,442
HEALTH SERVICES & MENTAL HEALTH ADMIN.	122,720	38,569	374	-	38,721	-	17,560	-	15,581	11,915
NATIONAL INSTITUTES OF HEALTH	776,100	155,603	46,323	-	424,593	40	118,597	1,231	16,600	13,113
OFFICE OF CHILD DEVELOPMENT	9,600	288	480	-	5,280	-	2,880	-	672	-
OFFICE OF EDUCATION	50,083	1,500	153	-	15,585	3,600	8,807	2,400	18,038	-
SOCIAL AND REHABILITATION SERVICE	38,954	100	-	-	16,189	-	9,822	-	5,706	7,137
SOCIAL SECURITY ADMINISTRATION	11,879	11,486	100	-	182	-	86	-	25	-
DEPARTMENT OF HOUSING & URBAN DEVELOP.	21,846	5,462	11,928	-	806	-	2,421	-	1,229	-
DEPARTMENT OF THE INTERIOR, TOTAL	95,290	55,852	12,380	300	18,396	-	2,760	-	5,343	259
BONNEVILLE POWER ADMINISTRATION	580	132	328	-	120	-	-	-	-	-
BUREAU OF LAND MANAGEMENT	813	468	-	-	305	-	-	-	40	-
BUREAU OF MINES	32,719	28,169	2,500	-	1,750	-	300	-	-	-
BUREAU OF OUTDOOR RECREATION	85	85	-	-	-	-	-	-	-	-
BUREAU OF RECLAMATION	9,607	3,991	914	-	4,064	-	-	-	638	-
BUREAU OF SPORT FISHERIES & WILDLIFE	12,435	7,917	-	-	108	-	-	-	4,410	-
GEOLOGICAL SURVEY	16,195	13,370	360	-	2,324	-	-	-	35	106
NATIONAL PARK SERVICE	407	407	-	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH	7,500	216	3,739	-	1,263	-	2,282	-	-	-
OFFICE OF SALINE WATER	4,130	355	3,175	300	200	-	100	-	-	-
OFFICE OF THE SECRETARY	405	13	207	-	32	-	-	-	-	153
OFFICE OF WATER RESOURCES RESEARCH	10,414	729	1,157	-	8,230	-	78	-	220	-
DEPARTMENT OF JUSTICE, TOTAL	14,484	1,018	3,988	-	2,397	-	934	-	6,147	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	63	665	-	322	-	434	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	13,000	955	3,323	-	2,075	-	500	-	6,147	-

CONTINUED ON NEXT PAGE

TABLE C-49. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	
DEPARTMENT OF LABOR, TOTAL	11,602	5,267	800	-	2,140	-	2,281	22	1,092	-
BUREAU OF LABOR STATISTICS	1,576	1,576	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION	1,867	1,708	-	-	159	-	-	-	-	-
MANPOWER ADMINISTRATION	7,803	1,717	780	-	1,951	-	2,263	-	1,092	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN.	150	150	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	206	116	20	-	30	-	18	22	-	-
DEPARTMENT OF STATE, TOTAL	25,363	3,813	64	-	15,934	-	1,771	63	289	3,429
DEPARTMENTAL FUNDS	550	109	64	-	-	-	25	63	289	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	24,813	3,704	-	-	15,934	-	1,746	-	-	3,429
DEPARTMENT OF TRANSPORTATION, TOTAL	154,011	60,507	56,924	-	10,475	61	3,057	3,021	19,966	-
FEDERAL AVIATION ADMINISTRATION	46,112	20,750	24,470	-	892	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION	24,347	3,896	3,896	-	523	61	487	61	15,423	-
FEDERAL RAILROAD ADMINISTRATION	20,728	11,608	7,691	-	600	-	-	829	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	29,191	12,260	8,679	-	5,000	-	1,792	584	876	-
OFFICE OF THE SECRETARY	15,041	4,512	10,079	-	450	-	-	-	-	-
UNITED STATES COAST GUARD	7,134	4,387	1,683	-	400	-	664	-	-	-
URBAN MASS TRANSPORTATION ADMIN.	11,458	3,094	426	-	2,610	-	114	1,547	3,667	-
DEPARTMENT OF THE TREASURY, TOTAL	542	542	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING	542	542	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION	10	1	9	-	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	581	581	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION	2,974	-	-	-	100	-	-	-	2,874	-
ATOMIC ENERGY COMMISSION	156,907	4,215	2,122	39,954	18,121	78,082	3,334	10,641	-	438
CIVIL AERONAUTICS BOARD	294	294	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION	301	301	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	58,546	22,300	16,638	-	12,547	-	950	230	2,846	3,035
FEDERAL COMMUNICATIONS COMMISSION	774	574	200	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD	503	503	-	-	-	-	-	-	-	-
FEDERAL TRADE COMMISSION	580	580	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION	439	98	20	-	-	-	121	-	200	-
LIBRARY OF CONGRESS	1,188	1,188	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.	826,884	380,584	347,248	10	47,826	38,841	11,358	120	-	897
NATIONAL SCIENCE FOUNDATION	70,665	1,770	1,000	1,665	61,083	1,664	1,236	2,247	-	-
OFFICE OF ECONOMIC OPPORTUNITY	61,264	1,870	8,502	-	7,985	-	42,907	-	-	-
OFFICE OF EMERGENCY PREPAREDNESS	515	255	175	-	-	-	85	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY	614	614	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY	810	100	-	-	-	-	710	-	-	-
POSTAL SERVICE	8,521	2,000	5,570	-	90	-	600	261	-	-
TENNESSEE VALLEY AUTHORITY	9,049	8,951	-	-	98	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY	1,362	632	445	-	50	-	235	-	-	-
UNITED STATES INFORMATION AGENCY	162	119	43	-	-	-	-	-	-	-
VETERANS ADMINISTRATION	63,931	62,794	215	-	604	-	133	-	185	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-50. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES	4,692,591	1,682,696	1,392,568	50,104	929,132	165,751	237,958	55,837	122,917	55,628
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	200,984	140,081	1,816	-	54,576	-	215	-	287	4,009
AGRICULTURAL RESEARCH SERVICE	100,282	94,428	151	-	1,504	-	190	-	-	4,009
COOPERATIVE STATE RESEARCH SERVICE	54,109	1,549	-	-	52,333	-	-	-	227	-
ECONOMIC RESEARCH SERVICE	11,785	11,375	-	-	350	-	-	-	60	-
FARMER COOPERATIVE SERVICE	827	827	-	-	-	-	-	-	-	-
FOREST SERVICE	33,287	31,488	1,525	-	274	-	-	-	-	-
NATIONAL AGRICULTURAL LIBRARY	261	161	-	-	75	-	25	-	-	-
STATISTICAL REPORTING SERVICE	433	253	140	-	40	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	128,360	59,425	33,115	-	28,968	-	802	-	5,325	725
ECONOMIC DEVELOPMENT ADMINISTRATION	1,354	641	100	-	433	-	180	-	-	-
MARITIME ADMINISTRATION	23,574	2,674	20,350	-	500	-	-	-	-	50
NATIONAL BUREAU OF STANDARDS	35,960	19,772	10,176	-	4,366	-	-	-	971	675
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	62,220	31,086	2,489	-	23,669	-	622	-	4,354	-
OFFICE OF TELECOMMUNICATIONS	4,079	4,079	-	-	-	-	-	-	-	-
PATENT OFFICE	121	121	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	1,052	1,052	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	1,514,498	565,654	768,775	3,920	83,804	33,816	30,532	26,166	140	1,691
DEPARTMENT OF THE ARMY	285,349	203,843	55,684	-	14,146	337	6,758	4,225	140	216
DEPARTMENT OF THE NAVY	233,721	149,772	54,209	-	9,950	15,389	4,401	-	-	-
DEPARTMENT OF THE AIR FORCE	635,255	114,895	477,815	-	29,110	285	12,600	-	-	550
DEFENSE AGENCIES	356,673	96,619	179,892	3,815	30,178	17,770	5,898	21,576	-	925
DEPARTMENTWIDE FUNDS	3,500	525	1,175	105	420	35	875	365	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,122,982	248,940	48,507	-	543,959	3,155	165,372	10,286	63,608	39,155
FOOD AND DRUG ADMINISTRATION	56,476	28,949	3,996	-	12,873	-	3,930	-	1,202	5,526
HEALTH SERVICES & MENTAL HEALTH ADMIN.	127,023	38,714	367	-	41,464	-	17,718	-	16,654	12,106
NATIONAL INSTITUTE OF EDUCATION	51,125	9,138	-	-	8,775	3,112	3,675	8,925	17,500	-
NATIONAL INSTITUTES OF HEALTH	801,800	159,234	42,927	-	445,391	43	121,814	1,361	18,007	13,023
OFFICE OF CHILD DEVELOPMENT	11,000	330	1,100	-	4,950	-	3,300	-	1,320	-
OFFICE OF EDUCATION	21,993	648	117	-	12,892	-	5,003	-	3,333	-
SOCIAL AND REHABILITATION SERVICE	41,472	109	-	-	17,414	-	9,882	-	5,567	8,500
SOCIAL SECURITY ADMINISTRATION	12,093	11,818	-	-	200	-	50	-	25	-
DEPARTMENT OF HOUSING & URBAN DEVELOP.	25,160	6,793	12,603	-	732	-	3,774	-	1,258	-
DEPARTMENT OF THE INTERIOR, TOTAL	100,107	57,954	13,420	300	21,289	-	1,641	-	5,278	225
BONNEVILLE POWER ADMINISTRATION	647	167	415	-	65	-	-	-	-	-
BUREAU OF LAND MANAGEMENT	801	461	-	-	300	-	-	-	40	-
BUREAU OF MINES	32,825	28,025	2,500	-	2,000	-	300	-	-	-
BUREAU OF OUTDOOR RECREATION	82	82	-	-	-	-	-	-	-	-
BUREAU OF RECLAMATION	8,842	3,757	1,075	-	3,460	-	-	-	550	-
BUREAU OF SPORT FISHERIES & WILDLIFE	13,322	8,810	-	-	102	-	-	-	4,410	-
GEOLOGICAL SURVEY	19,703	14,861	674	-	4,103	-	-	-	65	-
NATIONAL PARK SERVICE	407	407	-	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH	8,505	283	4,294	-	2,855	-	1,073	-	-	-
OFFICE OF SALINE WATER	4,055	355	3,150	300	100	-	150	-	-	-
OFFICE OF THE SECRETARY	425	13	147	-	40	-	-	-	-	225
OFFICE OF WATER RESOURCES RESEARCH	10,493	733	1,165	-	8,264	-	118	-	213	-
DEPARTMENT OF JUSTICE, TOTAL	16,984	1,513	4,915	-	3,022	-	934	-	6,600	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	63	665	-	322	-	434	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	15,500	1,450	4,250	-	2,700	-	500	-	6,600	-

CONTINUED ON NEXT PAGE

TABLE C-50. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	
DEPARTMENT OF LABOR, TOTAL.............	13,166	6,155	817	-	2,524	-	2,531	22	1,117	-
BUREAU OF LABOR STATISTICS.............	1,810	1,810	-	-	-	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	1,874	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,976	1,755	797	-	1,994	-	2,313	-	1,117	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	300	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	1,206	416	20	-	530	-	218	22	-	-
DEPARTMENT OF STATE, TOTAL.............	35,825	8,266	60	-	22,062	-	684	60	496	4,197
DEPARTMENTAL FUNDS.....................	750	109	60	-	-	-	25	60	496	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	35,075	8,157	-	-	22,062	-	659	-	-	4,197
DEPARTMENT OF TRANSPORTATION, TOTAL....	188,885	70,691	61,318	1,934	19,195	94	1,883	3,148	30,622	-
FEDERAL AVIATION ADMINISTRATION........	30,662	13,798	16,114	-	750	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	37,475	5,996	5,996	-	520	94	750	94	24,025	-
FEDERAL RAILROAD ADMINISTRATION........	36,441	20,771	13,412	1,458	800	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	36,998	15,539	11,239	-	8,000	-	370	740	1,110	-
OFFICE OF THE SECRETARY................	23,800	6,044	11,780	476	5,500	-	-	-	-	-
UNITED STATES COAST GUARD..............	6,365	3,914	1,359	-	500	-	592	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	17,144	4,629	1,418	-	3,125	-	171	2,314	5,487	-
DEPARTMENT OF THE TREASURY, TOTAL......	454	454	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	454	454	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ACTION.................................	75	20	30	-	25	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	567	567	-	-	-	-	-	-	-	-
APPALACHIAN REGIONAL COMMISSION........	3,000	-	-	-	100	-	-	-	2,900	-
ATOMIC ENERGY COMMISSION...............	171,152	5,695	1,724	40,550	19,099	88,360	3,060	12,175	-	489
CIVIL AERONAUTICS BOARD................	297	297	-	-	-	-	-	-	-	-
CIVIL SERVICE COMMISSION...............	318	318	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	67,801	23,600	25,834	-	11,547	-	950	230	3,400	2,240
FEDERAL COMMUNICATIONS COMMISSION......	803	603	200	-	-	-	-	-	-	-
FEDERAL HOME LOAN BANK BOARD...........	582	407	-	-	175	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	633	633	-	-	-	-	-	-	-	-
GENERAL SERVICES ADMINISTRATION........	527	90	45	-	-	-	17	-	375	-
LIBRARY OF CONGRESS....................	1,217	1,217	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	843,331	389,287	359,485	-	40,104	37,926	15,512	120	-	897
NATIONAL SCIENCE FOUNDATION............	94,915	5,555	4,430	3,400	71,255	2,400	1,135	3,380	1,360	2,000
OFFICE OF ECONOMIC OPPORTUNITY.........	64,576	3,976	48,190	-	5,610	-	6,800	-	-	-
OFFICE OF EMERGENCY PREPAREDNESS.......	515	255	175	-	-	-	85	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	627	627	-	-	-	-	-	-	-	-
OFFICE OF TELECOMMUNICATIONS POLICY....	1,300	100	-	-	-	-	1,200	-	-	-
POSTAL SERVICE.........................	10,246	3,457	6,129	-	110	-	300	250	-	-
TENNESSEE VALLEY AUTHORITY.............	10,146	9,995	-	-	151	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,745	580	775	-	75	-	315	-	-	-
UNITED STATES INFORMATION AGENCY.......	100	100	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	70,713	69,391	205	-	750	-	216	-	151	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-51. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH BY DETAILED FIELD OF SCIENCE, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

FIELD OF SCIENCE	ACTUAL, 1971	ESTIMATES	
		1972	1973
TOTAL, ALL FIELDS	4,017,859	4,354,278	4,692,591
LIFE SCIENCES, TOTAL	1,077,609	1,229,173	1,311,800
BIOLOGICAL	395,203	437,748	460,029
CLINICAL MEDICAL	490,028	552,004	596,627
OTHER MEDICAL SCIENCES	156,284	202,071	220,019
LIFE SCIENCES, NEC	36,094	37,350	35,125
PSYCHOLOGY, TOTAL	66,883	82,954	82,600
BIOLOGICAL ASPECTS	14,812	18,800	31,813
SOCIAL ASPECTS	44,166	56,171	42,502
PSYCHOLOGICAL SCIENCES, NEC	7,905	7,983	8,285
PHYSICAL SCIENCES, TOTAL	299,206	346,514	359,336
ASTRONOMY	3,716	4,904	4,868
CHEMISTRY	106,771	114,031	125,462
PHYSICS	155,756	190,066	192,001
PHYSICAL SCIENCES, NEC	32,963	37,513	37,005
ENVIRONMENTAL SCIENCES, TOTAL	284,755	308,736	337,184
ATMOSPHERIC SCIENCES	151,631	155,711	166,751
GEOLOGICAL SCIENCES	75,421	86,295	94,034
OCEANOGRAPHY (EXCLUDING BIOLOGICAL)	38,418	41,069	46,815
ENVIRONMENTAL SCIENCE, NEC	19,285	25,661	29,584
MATHEMATICS	69,463	78,337	82,476
ENGINEERING, TOTAL	1,891,496	1,937,676	2,049,305
AERONAUTICAL	514,016	495,632	635,097
ASTRONAUTICAL	262,144	269,141	252,046
CHEMICAL	119,226	116,823	116,101
CIVIL	79,427	107,433	132,616
ELECTRICAL	349,483	334,220	247,214
MECHANICAL	123,719	125,953	121,785
METALLURGY & MATERIALS	122,845	139,244	156,406
ENGINEERING, NEC	320,636	349,230	388,040
SOCIAL SCIENCES, TOTAL	236,098	249,929	296,720
ANTHROPOLOGY	3,009	3,541	4,003
ECONOMICS	49,855	57,696	60,279
HISTORY	516	850	1,092
LINGUISTICS	1,148	991	1,506
POLITICAL SCIENCE	2,911	3,091	5,339
SOCIOLOGY	89,099	98,852	109,444
SOCIAL SCIENCES, NEC	89,560	84,908	115,057
OTHER SCIENCES, NEC	92,349	120,959	173,170

TABLE C-52. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	4,017,859	1,077,609	66,883	299,206	284,755	69,463	1,891,496	236,098	92,349
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	173,738	101,343	26	22,031	3,715	396	20,475	25,361	391
AGRICULTURAL RESEARCH SERVICE..........	89,776	55,387	26	18,162	801	242	14,028	1,130	-
COOPERATIVE STATE RESEARCH SERVICE.....	42,012	28,868	-	2,101	262	-	1,440	9,341	-
ECONOMIC RESEARCH SERVICE..............	10,874	-	-	-	-	-	-	10,874	-
FARMER COOPERATIVE SERVICE.............	814	-	-	-	-	-	-	814	-
FOREST SERVICE.........................	29,460	17,088	-	1,768	2,652	-	5,007	2,945	-
NATIONAL AGRICULTURAL LIBRARY..........	391	-	-	-	-	-	-	-	391
STATISTICAL REPORTING SERVICE..........	411	-	-	-	-	154	-	257	-
DEPARTMENT OF COMMERCE, TOTAL..........	71,897	21,327	912	6,902	13,823	662	21,834	3,763	2,674
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	-	-	-	-	-	-	1,726	-
MARITIME ADMINISTRATION................	12,806	-	-	-	-	-	12,197	609	-
NATIONAL BUREAU OF STANDARDS...........	14,159	-	-	5,717	-	550	7,267	-	625
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	39,495	21,327	395	1,185	13,823	-	2,370	395	-
OFFICE OF TELECOMMUNICATIONS...........	1,637	-	-	-	-	-	-	-	1,637
PATENT OFFICE..........................	412	-	-	-	-	-	-	-	412
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,662	-	517	-	-	112	-	1,033	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,351,410	76,483	22,044	142,177	85,431	40,426	943,046	3,649	38,154
DEPARTMENT OF THE ARMY.................	292,617	42,029	8,265	61,275	11,410	3,604	154,934	2,895	8,205
DEPARTMENT OF THE NAVY.................	187,372	5,605	2,897	34,691	18,381	21,818	103,555	-	425
DEPARTMENT OF THE AIR FORCE............	592,467	23,655	9,857	1,432	8,300	570	548,653	-	-
DEFENSE AGENCIES.......................	275,927	4,883	733	44,340	47,340	14,095	135,070	288	29,178
DEPARTMENTWIDE FUNDS...................	3,027	311	292	439	-	339	834	466	346
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	905,014	686,236	33,171	15,223	969	14,451	19,049	100,413	35,502
FOOD AND DRUG ADMINISTRATION...........	25,643	20,567	-	5,076	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	115,589	83,226	17,341	-	-	1,199	31	13,558	234
NATIONAL INSTITUTES OF HEALTH..........	657,400	566,983	6,610	10,147	969	13,252	18,690	5,481	35,268
OFFICE OF CHILD DEVELOPMENT............	7,852	1,000	1,000	-	-	-	-	5,852	-
OFFICE OF EDUCATION....................	55,958	-	5,700	-	-	-	-	50,258	-
SOCIAL AND REHABILITATION SERVICE......	32,072	14,460	2,520	-	-	-	328	14,764	-
SOCIAL SECURITY ADMINISTRATION.........	10,500	-	-	-	-	-	-	10,500	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	10,496	-	-	-	210	-	9,236	1,050	-
DEPARTMENT OF THE INTERIOR, TOTAL......	86,381	14,632	66	5,876	18,970	1,484	43,543	1,631	179
BONNEVILLE POWER ADMINISTRATION........	341	-	-	27	46	20	248	-	-
BUREAU OF LAND MANAGEMENT..............	755	698	-	-	-	-	-	57	-
BUREAU OF MINES........................	32,214	-	-	3,450	2,372	756	25,636	-	-
BUREAU OF OUTDOOR RECREATION...........	185	-	-	-	-	-	-	185	-
BUREAU OF RECLAMATION..................	9,078	12	-	-	6,574	-	2,427	65	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	11,884	11,884	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	12,527	-	-	2,120	8,474	408	1,525	-	-
NATIONAL PARK SERVICE..................	437	187	-	-	-	-	-	250	-
OFFICE OF COAL RESEARCH................	4,955	-	-	-	-	-	4,955	-	-
OFFICE OF SALINE WATER.................	4,069	-	-	-	-	-	4,069	-	-
OFFICE OF THE SECRETARY................	153	-	-	-	-	-	153	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	9,783	1,851	66	279	1,504	300	4,530	1,074	179
DEPARTMENT OF JUSTICE, TOTAL...........	6,525	1,081	1,289	885	-	230	677	2,359	4
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,495	581	429	-	-	-	272	209	4
LAW ENFORCEMENT ASSISTANCE ADMIN.......	5,030	500	860	885	-	230	405	2,150	-
DEPARTMENT OF LABOR, TOTAL.............	11,120	-	-	-	-	-	-	11,120	-
BUREAU OF LABOR STATISTICS.............	1,450	-	-	-	-	-	-	1,450	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	-	-	-	-	-	-	1,501	-
MANPOWER ADMINISTRATION................	7,681	-	-	-	-	-	-	7,681	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	-	-	-	-	-	-	326	-
OFFICE OF THE SECRETARY................	162	-	-	-	-	-	-	162	-

CONTINUED ON NEXT PAGE

TABLE C-52. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1971

CONTINUED (THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOLOGY	PHYSICAL SCIENCES	ENVIRONMENTAL SCIENCES	MATHEMATICS	ENGINEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
DEPARTMENT OF STATE, TOTAL.............	28,975	19,087	-	-	1,579	-	1,560	6,749	-
DEPARTMENTAL FUNDS.....................	350	-	-	-	-	-	-	350	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	28,625	19,087	-	-	1,579	-	1,560	6,399	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	172,838	1,169	3,346	2,176	3,842	2,001	152,581	7,652	71
FEDERAL AVIATION ADMINISTRATION........	93,492	279	-	980	1,027	1,869	87,001	2,336	-
FEDERAL HIGHWAY ADMINISTRATION.........	23,734	118	475	308	1,685	47	20,057	973	71
FEDERAL RAILROAD ADMINISTRATION........	17,939	-	85	76	-	-	17,635	143	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	14,702	301	2,113	-	-	-	12,003	285	-
OFFICE OF THE SECRETARY................	8,540	-	43	342	170	85	7,516	384	-
UNITED STATES COAST GUARD..............	4,706	471	47	470	376	-	3,342	-	-
URBAN MASS TRANSPORTATION ADMIN........	9,725	-	583	-	584	-	5,027	3,531	-
DEPARTMENT OF THE TREASURY, TOTAL......	383	-	-	365	-	-	18	-	-
BUREAU OF ENGRAVING AND PRINTING.......	383	-	-	365	-	-	18	-	-
OTHER AGENCIES									
ACTION.................................	103	-	103	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	-	-	-	-	-	-	544	-
APPALACHIAN REGIONAL COMMISSION........	2,980	-	-	-	-	-	-	2,980	-
ATOMIC ENERGY COMMISSION...............	152,094	43,607	-	71,431	10,116	-	26,940	-	-
CIVIL AERONAUTICS BOARD................	277	-	-	-	-	-	-	277	-
CIVIL SERVICE COMMISSION...............	233	-	233	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	47,718	13,702	45	6,535	5,000	460	21,174	802	-
FEDERAL COMMUNICATIONS COMMISSION......	616	-	-	-	-	-	616	-	-
FEDERAL HOME LOAN BANK BOARD...........	395	-	-	-	-	-	-	395	-
FEDERAL TRADE COMMISSION...............	440	-	-	-	-	-	-	440	-
GENERAL SERVICES ADMINISTRATION........	93	-	-	-	-	-	41	-	52
LIBRARY OF CONGRESS....................	982	-	-	-	-	-	-	-	982
NATIONAL AERONAUTICS & SPACE ADMIN.....	816,686	40,199	1,239	22,096	134,553	-	612,816	-	5,783
NATIONAL SCIENCE FOUNDATION............	45,720	8,527	180	2,246	6,381	9,231	11,491	6,228	1,436
OFFICE OF ECONOMIC OPPORTUNITY.........	59,877	-	-	-	-	-	-	59,877	-
OFFICE OF EMERGENCY PREPAREDNESS.......	577	-	-	-	-	-	-	-	577
OFFICE OF SCIENCE AND TECHNOLOGY.......	609	186	7	156	54	11	183	12	-
OFFICE OF TELECOMMUNICATIONS POLICY....	177	-	-	-	-	-	177	-	-
POSTAL SERVICE.........................	1,012	-	-	-	-	-	-	-	1,012
TENNESSEE VALLEY AUTHORITY.............	7,455	2,239	-	1,107	-	-	3,877	232	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,354	-	-	-	112	111	785	346	-
UNITED STATES INFORMATION AGENCY.......	108	-	-	-	-	-	108	-	-
VETERANS ADMINISTRATION................	59,032	47,791	4,222	-	-	-	1,269	218	5,532

TABLE C-53. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	4,354,278	1,229,173	82,954	346,514	308,736	78,337	1,937,676	249,929	120,959
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	196,705	118,060	27	23,609	4,256	412	22,088	28,004	249
AGRICULTURAL RESEARCH SERVICE..........	101,173	64,374	27	19,135	1,079	254	14,885	1,419	-
COOPERATIVE STATE RESEARCH SERVICE.....	51,009	35,080	-	2,550	290	-	1,748	11,341	-
ECONOMIC RESEARCH SERVICE..............	10,947	-	-	-	-	-	-	10,947	-
FARMER COOPERATIVE SERVICE.............	827	-	-	-	-	-	-	827	-
FOREST SERVICE.........................	32,080	18,606	-	1,924	2,887	-	5,455	3,208	-
NATIONAL AGRICULTURAL LIBRARY..........	249	-	-	-	-	-	-	-	249
STATISTICAL REPORTING SERVICE..........	420	-	-	-	-	158	-	262	-
DEPARTMENT OF COMMERCE, TOTAL..........	91,908	27,056	896	7,551	17,537	662	28,784	5,327	4,095
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	-	-	-	-	-	-	1,284	-
MARITIME ADMINISTRATION................	20,099	-	-	-	-	-	17,337	2,762	-
NATIONAL BUREAU OF STANDARDS...........	15,764	-	-	6,048	-	580	8,441	-	695
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	50,104	27,056	501	1,503	17,537	-	3,006	501	-
OFFICE OF TELECOMMUNICATIONS...........	3,110	-	-	-	-	-	-	-	3,110
PATENT OFFICE..........................	290	-	-	-	-	-	-	-	290
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	1,257	-	395	-	-	82	-	780	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,428,555	77,835	28,787	169,842	93,267	43,206	968,435	5,384	41,799
DEPARTMENT OF THE ARMY.................	267,246	37,253	11,526	46,414	10,552	4,706	144,472	4,788	7,535
DEPARTMENT OF THE NAVY.................	220,366	8,164	4,806	43,337	20,898	22,208	120,953	-	-
DEPARTMENT OF THE AIR FORCE............	608,726	27,426	11,363	1,265	9,100	384	559,188	-	-
DEFENSE AGENCIES.......................	328,517	4,413	737	78,254	52,717	15,551	142,928	263	33,654
DEPARTMENTWIDE FUNDS...................	3,700	579	355	572	-	357	894	333	610
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,047,098	804,642	36,886	19,471	1,184	17,819	23,468	89,056	54,572
FOOD AND DRUG ADMINISTRATION...........	37,762	31,325	-	6,437	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	122,720	88,688	17,958	-	-	1,627	-	14,171	276
NATIONAL INSTITUTES OF HEALTH..........	776,100	664,692	8,180	13,034	1,184	16,192	22,868	6,684	43,266
OFFICE OF CHILD DEVELOPMENT............	9,600	1,200	2,100	-	-	-	-	6,300	-
OFFICE OF EDUCATION....................	50,083	-	6,098	-	-	-	-	43,985	-
SOCIAL AND REHABILITATION SERVICE......	38,954	18,737	2,550	-	-	-	600	6,037	11,030
SOCIAL SECURITY ADMINISTRATION.........	11,879	-	-	-	-	-	-	11,879	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	21,846	-	-	-	2,184	-	14,200	5,462	-
DEPARTMENT OF THE INTERIOR, TOTAL......	95,290	15,386	67	6,062	20,918	1,307	49,841	1,517	192
BONNEVILLE POWER ADMINISTRATION........	580	-	-	40	-	20	520	-	-
BUREAU OF LAND MANAGEMENT..............	813	755	-	-	-	-	-	58	-
BUREAU OF MINES........................	32,719	-	-	3,364	793	513	28,049	-	-
BUREAU OF OUTDOOR RECREATION...........	85	-	-	-	-	-	-	85	-
BUREAU OF RECLAMATION..................	9,607	5	-	-	6,559	-	2,956	87	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	12,435	12,435	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	16,195	-	-	2,362	11,875	454	1,504	-	-
NATIONAL PARK SERVICE..................	407	207	-	-	-	-	-	200	-
OFFICE OF COAL RESEARCH................	7,500	-	-	-	-	-	7,500	-	-
OFFICE OF SALINE WATER.................	4,130	-	-	-	-	-	4,130	-	-
OFFICE OF THE SECRETARY................	405	-	-	-	83	-	322	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	10,414	1,984	67	296	1,608	320	4,860	1,087	192
DEPARTMENT OF JUSTICE, TOTAL...........	14,484	1,895	3,167	-	-	600	1,600	7,197	25
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	595	567	-	-	-	-	297	25
LAW ENFORCEMENT ASSISTANCE ADMIN.......	13,000	1,300	2,600	-	-	600	1,600	6,900	-
DEPARTMENT OF LABOR, TOTAL.............	11,602	-	-	-	-	-	-	11,602	-
BUREAU OF LABOR STATISTICS.............	1,576	-	-	-	-	-	-	1,576	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	-	-	-	-	-	-	1,867	-
MANPOWER ADMINISTRATION................	7,803	-	-	-	-	-	-	7,803	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	-	-	-	-	-	-	150	-
OFFICE OF THE SECRETARY................	206	-	-	-	-	-	-	206	-

CONTINUED ON NEXT PAGE

TABLE C-53. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOL-OGY	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICS	ENGI-NEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
DEPARTMENT OF STATE, TOTAL.............	25,363	10,032	-	-	840	-	4,387	10,104	-
DEPARTMENTAL FUNDS......................	550	-	-	-	-	-	-	550	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	24,813	10,032	-	-	840	-	4,387	9,554	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	154,011	1,571	5,623	2,198	3,550	1,190	132,162	7,644	73
FEDERAL AVIATION ADMINISTRATION........	46,112	138	-	484	507	990	42,933	1,060	-
FEDERAL HIGHWAY ADMINISTRATION.........	24,347	123	490	316	1,484	50	20,813	998	73
FEDERAL RAILROAD ADMINISTRATION........	20,728	-	104	83	-	-	20,375	166	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	29,191	597	4,196	-	-	-	23,832	566	-
OFFICE OF THE SECRETARY................	15,041	-	75	602	301	150	13,237	676	-
UNITED STATES COAST GUARD..............	7,134	713	71	713	571	-	5,066	-	-
URBAN MASS TRANSPORTATION ADMIN........	11,458	-	687	-	687	-	5,906	4,178	-
DEPARTMENT OF THE TREASURY, TOTAL......	542	-	-	524	-	-	18	-	-
BUREAU OF ENGRAVING AND PRINTING.......	542	-	-	524	-	-	18	-	-
OTHER AGENCIES									
ACTION.................................	10	-	10	-	-	-	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	581	-	-	-	-	-	-	581	-
APPALACHIAN REGIONAL COMMISSION........	2,974	-	-	-	-	-	-	2,974	-
ATOMIC ENERGY COMMISSION...............	156,907	45,046	-	74,315	11,548	-	25,998	-	-
CIVIL AERONAUTICS BOARD................	294	-	-	-	-	-	-	294	-
CIVIL SERVICE COMMISSION...............	301	-	301	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	58,546	15,339	75	5,790	5,725	380	30,037	1,200	-
FEDERAL COMMUNICATIONS COMMISSION......	774	-	-	-	-	-	774	-	-
FEDERAL HOME LOAN BANK BOARD...........	503	-	-	-	-	-	-	503	-
FEDERAL TRADE COMMISSION...............	580	-	-	-	-	-	-	580	-
GENERAL SERVICES ADMINISTRATION........	439	-	-	-	-	-	399	-	40
LIBRARY OF CONGRESS....................	1,188	-	-	-	-	-	-	-	1,188
NATIONAL AERONAUTICS & SPACE ADMIN.....	826,884	43,344	2,309	30,862	139,976	-	610,393	-	-
NATIONAL SCIENCE FOUNDATION............	70,665	14,762	220	4,950	7,576	12,640	16,330	10,474	3,713
OFFICE OF ECONOMIC OPPORTUNITY.........	61,264	-	-	-	-	-	-	61,264	-
OFFICE OF EMERGENCY PREPAREDNESS.......	515	-	-	-	-	-	-	-	515
OFFICE OF SCIENCE AND TECHNOLOGY.......	614	188	7	157	55	11	184	12	-
OFFICE OF TELECOMMUNICATIONS POLICY....	810	-	-	-	-	-	810	-	-
POSTAL SERVICE.........................	8,521	-	-	-	-	-	-	-	8,521
TENNESSEE VALLEY AUTHORITY.............	9,049	2,254	-	1,183	-	-	5,396	216	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,362	-	-	-	120	110	836	296	-
UNITED STATES INFORMATION AGENCY.......	162	-	-	-	-	-	162	-	-
VETERANS ADMINISTRATION................	63,931	51,763	4,579	-	-	-	1,374	238	5,977

TABLE C-54. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOLOGY	PHYSICAL SCIENCES	ENVIRONMENTAL SCIENCES	MATHEMATICS	ENGINEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
TOTAL, ALL AGENCIES....................	4,692,591	1,311,800	82,600	359,336	337,184	82,476	2,049,305	296,720	173,170
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	200,984	120,278	27	23,392	4,679	419	21,983	29,946	251
AGRICULTURAL RESEARCH SERVICE..........	100,282	63,760	27	18,689	1,376	247	14,470	1,713	-
COOPERATIVE STATE RESEARCH SERVICE.....	54,109	37,213	-	2,705	307	-	1,854	12,030	-
ECONOMIC RESEARCH SERVICE..............	11,785	-	-	-	-	-	-	11,785	-
FARMER COOPERATIVE SERVICE.............	827	-	-	-	-	-	-	827	-
FOREST SERVICE.........................	33,287	19,305	-	1,998	2,996	-	5,659	3,329	-
NATIONAL AGRICULTURAL LIBRARY..........	261	-	-	-	-	-	-	-	261
STATISTICAL REPORTING SERVICE..........	433	-	-	-	-	172	-	261	-
DEPARTMENT OF COMMERCE, TOTAL..........	128,360	33,588	908	9,697	21,788	742	50,274	3,357	8,006
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,354	-	-	-	-	-	-	1,354	-
MARITIME ADMINISTRATION................	23,574	-	-	-	-	-	22,874	700	-
NATIONAL BUREAU OF STANDARDS...........	35,960	-	-	7,830	-	657	23,667	-	3,806
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	62,220	33,588	622	1,867	21,788	-	3,733	622	-
OFFICE OF TELECOMMUNICATIONS...........	4,079	-	-	-	-	-	-	-	4,079
PATENT OFFICE..........................	121	-	-	-	-	-	-	-	121
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	1,052	-	286	-	-	85	-	681	-
DEPARTMENT OF DEFENSE, TOTAL...........	1,514,498	87,985	28,664	170,033	99,024	45,655	995,926	7,072	80,139
DEPARTMENT OF THE ARMY.................	285,349	46,577	10,322	53,913	12,600	4,201	144,027	6,364	7,345
DEPARTMENT OF THE NAVY.................	233,721	8,929	5,108	45,700	23,998	25,867	124,119	-	-
DEPARTMENT OF THE AIR FORCE............	635,255	27,570	12,773	1,389	9,500	580	583,443	-	-
DEFENSE AGENCIES.......................	356,673	4,425	160	68,475	52,926	14,640	143,471	300	72,276
DEPARTMENTWIDE FUNDS...................	3,500	484	301	556	-	367	866	408	518
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	1,122,982	845,733	33,131	21,737	1,279	19,207	25,337	119,001	57,557
FOOD AND DRUG ADMINISTRATION...........	56,476	48,667	-	7,809	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	127,023	92,304	19,164	-	-	1,716	-	13,557	282
NATIONAL INSTITUTE OF EDUCATION........	51,125	-	-	-	-	-	-	51,125	-
NATIONAL INSTITUTES OF HEALTH..........	801,800	682,213	8,809	13,928	1,279	17,491	24,737	7,218	46,125
OFFICE OF CHILD DEVELOPMENT............	11,000	1,600	2,300	-	-	-	-	7,100	-
OFFICE OF EDUCATION....................	21,993	-	150	-	-	-	-	21,843	-
SOCIAL AND REHABILITATION SERVICE......	41,472	20,949	2,708	-	-	-	600	6,065	11,150
SOCIAL SECURITY ADMINISTRATION.........	12,093	-	-	-	-	-	-	12,093	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	25,160	-	-	-	5,032	-	13,838	6,290	-
DEPARTMENT OF THE INTERIOR, TOTAL......	100,107	16,257	67	5,891	23,984	1,316	50,889	1,511	192
BONNEVILLE POWER ADMINISTRATION........	647	-	-	-	-	20	627	-	-
BUREAU OF LAND MANAGEMENT..............	801	739	-	-	-	-	-	62	-
BUREAU OF MINES........................	32,825	-	-	3,128	775	502	28,420	-	-
BUREAU OF OUTDOOR RECREATION...........	82	-	-	-	-	-	-	82	-
BUREAU OF RECLAMATION..................	8,842	5	-	-	6,200	-	2,557	80	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	13,322	13,322	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	19,703	-	-	2,467	15,177	474	1,585	-	-
NATIONAL PARK SERVICE..................	407	207	-	-	-	-	-	200	-
OFFICE OF COAL RESEARCH................	8,505	-	-	-	-	-	8,505	-	-
OFFICE OF SALINE WATER.................	4,055	-	-	-	-	-	4,055	-	-
OFFICE OF THE SECRETARY................	425	-	-	-	155	-	270	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	10,493	1,984	67	296	1,677	320	4,870	1,087	192
DEPARTMENT OF JUSTICE, TOTAL...........	16,984	2,295	3,716	-	-	700	1,900	8,348	25
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	1,484	595	616	-	-	-	-	248	25
LAW ENFORCEMENT ASSISTANCE ADMIN.......	15,500	1,700	3,100	-	-	700	1,900	8,100	-
DEPARTMENT OF LABOR, TOTAL.............	13,166	-	-	-	-	-	-	13,166	-
BUREAU OF LABOR STATISTICS.............	1,810	-	-	-	-	-	-	1,810	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	-	-	-	-	-	-	1,874	-
MANPOWER ADMINISTRATION................	7,976	-	-	-	-	-	-	7,976	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	-	-	-	-	-	-	300	-
OFFICE OF THE SECRETARY................	1,206	-	-	-	-	-	-	1,206	-

CONTINUED ON NEXT PAGE

TABLE C-54. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH, BY AGENCY AND FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	LIFE SCIENCES	PSYCHOLOGY	PHYSICAL SCIENCES	ENVIRONMENTAL SCIENCES	MATHEMATICS	ENGINEERING	SOCIAL SCIENCES	OTHER SCIENCES NEC
DEPARTMENT OF STATE, TOTAL.............	35,825	18,798	-	-	1,638	-	1,600	13,789	-
DEPARTMENTAL FUNDS......................	750	-	-	-	-	-	-	750	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	35,075	18,798	-	-	1,638	-	1,600	13,039	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	188,885	1,670	7,462	2,543	3,636	925	161,932	10,605	112
FEDERAL AVIATION ADMINISTRATION........	30,662	92	-	322	338	613	28,531	766	-
FEDERAL HIGHWAY ADMINISTRATION.........	37,475	186	749	486	1,284	74	33,049	1,535	112
FEDERAL RAILROAD ADMINISTRATION........	36,441	-	182	146	-	-	35,821	292	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	36,998	756	5,319	-	-	-	30,205	718	-
OFFICE OF THE SECRETARY................	23,800	-	119	952	476	238	20,944	1,071	-
UNITED STATES COAST GUARD..............	6,365	636	64	637	509	-	4,519	-	-
URBAN MASS TRANSPORTATION ADMIN........	17,144	-	1,029	-	1,029	-	8,863	6,223	-
DEPARTMENT OF THE TREASURY, TOTAL......	454	-	-	436	-	-	18	-	-
BUREAU OF ENGRAVING AND PRINTING.......	454	-	-	436	-	-	18	-	-
OTHER AGENCIES									
ACTION..................................	75	-	50	-	-	-	-	25	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	567	-	-	-	-	-	-	567	-
APPALACHIAN REGIONAL COMMISSION........	3,000	-	-	-	-	-	-	3,000	-
ATOMIC ENERGY COMMISSION...............	171,152	47,086	-	86,989	10,904	-	26,173	-	-
CIVIL AERONAUTICS BOARD................	297	-	-	-	-	-	-	297	-
CIVIL SERVICE COMMISSION...............	318	-	318	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	67,801	17,785	125	6,200	6,925	425	34,741	1,600	-
FEDERAL COMMUNICATIONS COMMISSION......	803	-	-	-	-	-	803	-	-
FEDERAL HOME LOAN BANK BOARD...........	582	-	-	-	-	-	-	582	-
FEDERAL TRADE COMMISSION...............	633	-	-	-	-	-	-	633	-
GENERAL SERVICES ADMINISTRATION........	527	-	-	-	-	-	487	-	40
LIBRARY OF CONGRESS....................	1,217	-	-	-	-	-	-	-	1,217
NATIONAL AERONAUTICS & SPACE ADMIN.....	843,331	43,101	2,815	22,515	149,809	-	625,091	-	-
NATIONAL SCIENCE FOUNDATION............	94,915	17,320	240	8,350	8,270	12,840	28,145	11,500	8,250
OFFICE OF ECONOMIC OPPORTUNITY.........	64,576	-	-	-	-	-	-	64,576	-
OFFICE OF EMERGENCY PREPAREDNESS.......	515	-	-	-	-	-	-	-	515
OFFICE OF SCIENCE AND TECHNOLOGY.......	627	192	7	160	56	12	188	12	-
OFFICE OF TELECOMMUNICATIONS POLICY....	1,300	-	-	-	-	-	1,300	-	-
POSTAL SERVICE.........................	10,246	-	-	-	-	-	-	-	10,246
TENNESSEE VALLEY AUTHORITY.............	10,146	2,461	-	1,393	-	-	6,071	221	-
US ARMS CONTROL & DISARMAMENT AGENCY...	1,745	-	-	-	160	235	990	360	-
UNITED STATES INFORMATION AGENCY.......	100	-	-	-	-	-	100	-	-
VETERANS ADMINISTRATION................	70,713	57,251	5,070	-	-	-	1,519	263	6,610

TABLE C-55. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	66,883	14,812	44,166	7,905	299,206	3,716	106,771	155,756	32,963
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	26	-	26	-	22,031	-	17,540	4,491	-
AGRICULTURAL RESEARCH SERVICE..........	26	-	26	-	18,162	-	14,555	3,607	-
COOPERATIVE STATE RESEARCH SERVICE.....	-	-	-	-	2,101	-	2,101	-	-
FOREST SERVICE.........................	-	-	-	-	1,768	-	884	884	-
DEPARTMENT OF COMMERCE, TOTAL..........	912	395	517	-	6,902	-	2,945	3,833	124
NATIONAL BUREAU OF STANDARDS...........	-	-	-	-	5,717	-	1,760	3,833	124
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	395	395	-	-	1,185	-	1,185	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	517	-	517	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	22,044	3,915	17,451	678	142,177	709	31,980	76,869	32,619
DEPARTMENT OF THE ARMY.................	8,265	3,131	5,134	-	61,275	11	28,493	26,118	6,653
DEPARTMENT OF THE NAVY.................	2,897	-	2,767	130	34,691	644	2,481	28,867	2,699
DEPARTMENT OF THE AIR FORCE............	9,857	570	9,287	-	1,432	-	-	1,432	-
DEFENSE AGENCIES.......................	733	185	-	548	44,340	54	1,000	20,019	23,267
DEPARTMENTWIDE FUNDS...................	292	29	263	-	439	-	6	433	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	33,171	5,584	20,360	7,227	15,223	-	15,017	206	-
FOOD AND DRUG ADMINISTRATION...........	-	-	-	-	5,076	-	5,076	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	17,341	4,429	10,960	1,952	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	6,610	1,155	245	5,210	10,147	-	9,941	206	-
OFFICE OF CHILD DEVELOPMENT............	1,000	-	1,000	-	-	-	-	-	-
OFFICE OF EDUCATION....................	5,700	-	5,635	65	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	2,520	-	2,520	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	66	-	66	-	5,876	-	5,182	694	-
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	27	-	-	27	-
BUREAU OF MINES........................	-	-	-	-	3,450	-	3,200	250	-
GEOLOGICAL SURVEY......................	-	-	-	-	2,120	-	1,712	408	-
OFFICE OF WATER RESOURCES RESEARCH.....	66	-	66	-	279	-	270	9	-
DEPARTMENT OF JUSTICE, TOTAL...........	1,289	-	1,289	-	885	-	610	275	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	429	-	429	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	860	-	860	-	885	-	610	275	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	3,346	203	3,143	-	2,176	46	448	1,682	-
FEDERAL AVIATION ADMINISTRATION........	-	-	-	-	980	46	-	934	-
FEDERAL HIGHWAY ADMINISTRATION.........	475	-	475	-	308	-	166	142	-
FEDERAL RAILROAD ADMINISTRATION........	85	-	85	-	76	-	-	76	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	2,113	203	1,910	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	43	-	43	-	342	-	-	342	-
UNITED STATES COAST GUARD..............	47	-	47	-	470	-	282	188	-
URBAN MASS TRANSPORTATION ADMIN........	583	-	583	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL......	-	-	-	-	365	-	95	50	220
BUREAU OF ENGRAVING AND PRINTING.......	-	-	-	-	365	-	95	50	220
OTHER AGENCIES									
ACTION.................................	103	-	103	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION...............	-	-	-	-	71,431	-	23,776	47,655	-
CIVIL SERVICE COMMISSION...............	233	-	233	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	45	45	-	-	6,535	-	4,627	1,908	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,239	1,239	-	-	22,096	2,951	1,928	17,217	-
NATIONAL SCIENCE FOUNDATION............	180	150	30	-	2,246	-	1,466	780	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	7	4	3	-	156	10	50	96	-
TENNESSEE VALLEY AUTHORITY.............	-	-	-	-	1,107	-	1,107	-	-
VETERANS ADMINISTRATION................	4,222	3,277	945	-	-	-	-	-	-

TABLE C-56. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES	82,954	18,800	56,171	7,983	346,514	4,904	114,031	190,066	37,513
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL	27	-	27	-	23,609	-	18,778	4,831	-
AGRICULTURAL RESEARCH SERVICE	27	-	27	-	19,135	-	15,266	3,869	-
COOPERATIVE STATE RESEARCH SERVICE	-	-	-	-	2,550	-	2,550	-	-
FOREST SERVICE	-	-	-	-	1,924	-	962	962	-
DEPARTMENT OF COMMERCE, TOTAL	896	501	395	-	7,551	-	3,388	4,034	129
NATIONAL BUREAU OF STANDARDS	-	-	-	-	6,048	-	1,885	4,034	129
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	501	501	-	-	1,503	-	1,503	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	395	-	395	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	28,787	4,742	23,052	993	169,842	640	27,245	104,927	37,030
DEPARTMENT OF THE ARMY	11,526	4,332	7,194	-	46,414	-	23,403	16,561	6,450
DEPARTMENT OF THE NAVY	4,806	-	4,546	260	43,337	640	3,098	36,582	3,017
DEPARTMENT OF THE AIR FORCE	11,363	384	10,979	-	1,265	-	-	1,265	-
DEFENSE AGENCIES	737	4	-	733	78,254	-	744	49,947	27,563
DEPARTMENTWIDE FUNDS	355	22	333	-	572	-	-	572	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	36,886	6,864	23,032	6,990	19,471	-	19,216	255	-
FOOD AND DRUG ADMINISTRATION	-	-	-	-	6,437	-	6,437	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	17,958	5,408	12,029	521	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	8,180	1,456	305	6,419	13,034	-	12,779	255	-
OFFICE OF CHILD DEVELOPMENT	2,100	-	2,100	-	-	-	-	-	-
OFFICE OF EDUCATION	6,098	-	6,048	50	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE	2,550	-	2,550	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	67	-	67	-	6,062	-	5,293	769	-
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	40	-	-	40	-
BUREAU OF MINES	-	-	-	-	3,364	-	3,096	268	-
GEOLOGICAL SURVEY	-	-	-	-	2,362	-	1,908	454	-
OFFICE OF WATER RESOURCES RESEARCH	67	-	67	-	296	-	289	7	-
DEPARTMENT OF JUSTICE, TOTAL	3,167	200	2,967	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	567	-	567	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	2,600	200	2,400	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	5,623	403	5,220	-	2,198	23	598	1,577	-
FEDERAL AVIATION ADMINISTRATION	-	-	-	-	484	23	-	461	-
FEDERAL HIGHWAY ADMINISTRATION	490	-	490	-	316	-	170	146	-
FEDERAL RAILROAD ADMINISTRATION	104	-	104	-	83	-	-	83	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	4,196	403	3,793	-	-	-	-	-	-
OFFICE OF THE SECRETARY	75	-	75	-	602	-	-	602	-
UNITED STATES COAST GUARD	71	-	71	-	713	-	428	285	-
URBAN MASS TRANSPORTATION ADMIN.	687	-	687	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL	-	-	-	-	524	-	95	75	354
BUREAU OF ENGRAVING AND PRINTING	-	-	-	-	524	-	95	75	354
OTHER AGENCIES									
ACTION	10	-	10		-	-	-	-	-
ATOMIC ENERGY COMMISSION	-	-	-	-	74,315	-	25,665	48,650	-
CIVIL SERVICE COMMISSION	301	-	301	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	75	50	25	-	5,790	-	5,320	470	-
NATIONAL AERONAUTICS & SPACE ADMIN.	2,309	2,309	-	-	30,862	4,231	3,450	23,181	-
NATIONAL SCIENCE FOUNDATION	220	170	50	-	4,950	-	3,750	1,200	-
OFFICE OF SCIENCE AND TECHNOLOGY	7	4	3	-	157	10	50	97	-
TENNESSEE VALLEY AUTHORITY	-	-	-	-	1,183	-	1,183	-	-
VETERANS ADMINISTRATION	4,579	3,557	1,022	-	-	-	-	-	-

TABLE C-57. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN PSYCHOLOGY AND PHYSICAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	PSYCHOLOGY				PHYSICAL SCIENCES				
	TOTAL	BIOLOGICAL ASPECTS	SOCIAL ASPECTS	PSYCHO-LOGICAL SCIENCES NEC	TOTAL	ASTRONOMY	CHEMISTRY	PHYSICS	PHYSICAL SCIENCES NEC
TOTAL, ALL AGENCIES	82,600	31,813	42,502	8,285	359,336	4,868	125,462	192,001	37,005
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL	27	-	27	-	23,392	-	18,657	4,735	-
AGRICULTURAL RESEARCH SERVICE	27	-	27	-	18,689	-	14,953	3,736	-
COOPERATIVE STATE RESEARCH SERVICE	-	-	-	-	2,705	-	2,705	-	-
FOREST SERVICE	-	-	-	-	1,998	-	999	999	-
DEPARTMENT OF COMMERCE, TOTAL	908	622	286	-	9,697	-	4,452	5,113	132
NATIONAL BUREAU OF STANDARDS	-	-	-	-	7,830	-	2,585	5,113	132
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	622	622	-	-	1,867	-	1,867	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	286	-	286	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	28,664	16,134	12,163	367	170,033	619	30,845	101,972	36,597
DEPARTMENT OF THE ARMY	10,322	3,339	6,983	-	53,913	11	26,700	17,913	9,289
DEPARTMENT OF THE NAVY	5,108	-	4,901	207	45,700	608	2,839	39,346	2,907
DEPARTMENT OF THE AIR FORCE	12,773	12,773	-	-	1,389	-	151	1,238	-
DEFENSE AGENCIES	160	-	-	160	68,475	-	1,155	42,919	24,401
DEPARTMENTWIDE FUNDS	301	22	279	-	556	-	-	556	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	33,131	7,247	17,966	7,918	21,737	-	21,462	275	-
FOOD AND DRUG ADMINISTRATION	-	-	-	-	7,809	-	7,809	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	19,164	5,684	12,630	850	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	8,809	1,563	328	6,918	13,928	-	13,653	275	-
OFFICE OF CHILD DEVELOPMENT	2,300	-	2,300	-	-	-	-	-	-
OFFICE OF EDUCATION	150	-	-	150	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE	2,708	-	2,708	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	67	-	67	-	5,891	-	5,138	753	-
BUREAU OF MINES	-	-	-	-	3,128	-	2,856	272	-
GEOLOGICAL SURVEY	-	-	-	-	2,467	-	1,993	474	-
OFFICE OF WATER RESOURCES RESEARCH	67	-	67	-	296	-	289	7	-
DEPARTMENT OF JUSTICE, TOTAL	3,716	300	3,416	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	616	-	616	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	3,100	300	2,800	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	7,462	511	6,951	-	2,543	15	644	1,884	-
FEDERAL AVIATION ADMINISTRATION	-	-	-	-	322	15	-	307	-
FEDERAL HIGHWAY ADMINISTRATION	749	-	749	-	486	-	262	224	-
FEDERAL RAILROAD ADMINISTRATION	182	-	182	-	146	-	-	146	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	5,319	511	4,808	-	-	-	-	-	-
OFFICE OF THE SECRETARY	119	-	119	-	952	-	-	952	-
UNITED STATES COAST GUARD	64	-	64	-	637	-	382	255	-
URBAN MASS TRANSPORTATION ADMIN.	1,029	-	1,029	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL	-	-	-	-	436	-	100	60	276
BUREAU OF ENGRAVING AND PRINTING	-	-	-	-	436	-	100	60	276
OTHER AGENCIES									
ACTION	50	-	50	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	-	-	-	-	86,989	-	28,859	58,130	-
CIVIL SERVICE COMMISSION	318	-	318	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	125	50	75	-	6,200	-	5,520	680	-
NATIONAL AERONAUTICS & SPACE ADMIN.	2,815	2,815	-	-	22,515	4,224	2,811	15,480	-
NATIONAL SCIENCE FOUNDATION	240	190	50	-	8,350	-	5,530	2,820	-
OFFICE OF SCIENCE AND TECHNOLOGY	7	4	3	-	160	10	51	99	-
TENNESSEE VALLEY AUTHORITY	-	-	-	-	1,393	-	1,393	-	-
VETERANS ADMINISTRATION	5,070	3,940	1,130	-	-	-	-	-	-

TABLE C-58. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES	1,077,609	395,203	490,028	156,284	36,094	284,755	151,631	75,421	38,418	19,285
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	101,343	99,442	1,901	-	-	3,715	1,301	2,414	-	-
AGRICULTURAL RESEARCH SERVICE	55,387	55,387	-	-	-	801	155	646	-	-
COOPERATIVE STATE RESEARCH SERVICE	28,868	26,967	1,901	-	-	262	262	-	-	-
FOREST SERVICE	17,088	17,088	-	-	-	2,652	884	1,768	-	-
DEPARTMENT OF COMMERCE, TOTAL	21,327	21,327	-	-	-	13,823	8,289	3,553	1,981	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	21,327	21,327	-	-	-	13,823	8,289	3,553	1,981	-
DEPARTMENT OF DEFENSE, TOTAL	76,483	22,440	29,918	23,655	470	85,431	26,421	22,727	18,851	17,432
DEPARTMENT OF THE ARMY	42,029	17,195	24,564	-	270	11,410	5,927	3,860	1,500	123
DEPARTMENT OF THE NAVY	5,605	374	5,231	-	-	18,381	1,911	-	15,536	934
DEPARTMENT OF THE AIR FORCE	23,655	-	-	23,655	-	8,300	8,300	-	-	-
DEFENSE AGENCIES	4,883	4,683	-	-	200	47,340	10,283	18,867	1,815	16,375
DEPARTMENTWIDE FUNDS	311	188	123	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	686,236	143,608	420,537	117,656	4,435	969	-	-	-	969
FOOD AND DRUG ADMINISTRATION	20,567	15,535	-	5,032	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	83,226	11,094	71,029	1,103	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	566,983	116,979	335,666	109,903	4,435	969	-	-	-	969
OFFICE OF CHILD DEVELOPMENT	1,000	-	1,000	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE	14,460	-	12,842	1,618	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP.	-	-	-	-	-	210	92	44	-	74
DEPARTMENT OF THE INTERIOR, TOTAL	14,632	14,605	-	-	27	18,970	6,642	12,273	31	24
BONNEVILLE POWER ADMINISTRATION	-	-	-	-	-	46	-	46	-	-
BUREAU OF LAND MANAGEMENT	698	698	-	-	-	-	-	-	-	-
BUREAU OF MINES	-	-	-	-	-	2,372	-	2,353	19	-
BUREAU OF RECLAMATION	12	-	-	-	12	6,574	6,574	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE	11,884	11,884	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY	-	-	-	-	-	8,474	-	8,474	-	-
NATIONAL PARK SERVICE	187	187	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	-	-	-	-	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH	1,851	1,836	-	-	15	1,504	68	1,400	12	24
DEPARTMENT OF JUSTICE, TOTAL	1,081	1,081	-	-	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	581	581	-	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	500	500	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL	19,087	12,750	6,337	-	-	1,579	-	1,579	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	19,087	12,750	6,337	-	-	1,579	-	1,579	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	1,169	843	186	140	-	3,842	1,350	1,424	282	786
FEDERAL AVIATION ADMINISTRATION	279	-	186	93	-	1,027	934	-	-	93
FEDERAL HIGHWAY ADMINISTRATION	118	71	-	47	-	1,685	237	1,424	-	24
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	301	301	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	-	-	-	-	-	170	85	-	-	85
UNITED STATES COAST GUARD	471	471	-	-	-	376	94	-	282	-
URBAN MASS TRANSPORTATION ADMIN.	-	-	-	-	-	584	-	-	-	584
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION	43,607	35,382	8,225	-	-	10,116	5,812	2,085	2,219	-
ENVIRONMENTAL PROTECTION AGENCY	13,702	10,908	344	2,450	-	5,000	3,120	80	1,800	-
NATIONAL AERONAUTICS & SPACE ADMIN.	40,199	7,657	-	1,960	30,582	134,553	94,608	28,492	11,453	-
NATIONAL SCIENCE FOUNDATION	8,527	8,527	-	-	-	6,381	3,979	612	1,790	-
OFFICE OF SCIENCE AND TECHNOLOGY	186	113	73	-	-	54	17	26	11	-
SMITHSONIAN INSTITUTION	-	-	-	-	-	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY	2,239	2,239	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY	-	-	-	-	-	112	-	112	-	-
VETERANS ADMINISTRATION	47,791	14,281	22,507	10,423	580	-	-	-	-	-

TABLE C-59. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	1,229,173	437,748	552,004	202,071	37,350	308,736	155,711	86,295	41,069	25,661
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	118,060	115,752	2,308	-	-	4,256	1,421	2,835	-	-
AGRICULTURAL RESEARCH SERVICE..........	64,374	64,374	-	-	-	1,079	169	910	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	35,080	32,772	2,308	-	-	290	290	-	-	-
FOREST SERVICE.........................	18,606	18,606	-	-	-	2,887	962	1,925	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	27,056	27,056	-	-	-	17,537	10,521	4,510	2,506	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	27,056	27,056	-	-	-	17,537	10,521	4,510	2,506	-
DEPARTMENT OF DEFENSE, TOTAL...........	77,835	20,334	29,763	27,479	259	93,267	29,125	21,901	19,459	22,782
DEPARTMENT OF THE ARMY.................	37,253	15,236	21,759	53	205	10,552	5,898	2,656	1,923	75
DEPARTMENT OF THE NAVY.................	8,164	403	7,761	-	-	20,898	3,865	-	15,509	1,524
DEPARTMENT OF THE AIR FORCE............	27,426	-	-	27,426	-	9,100	9,100	-	-	-
DEFENSE AGENCIES.......................	4,413	4,359	-	-	54	52,717	10,262	19,245	2,027	21,183
DEPARTMENTWIDE FUNDS...................	579	336	243	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	804,642	160,935	486,126	153,049	4,532	1,184	-	-	-	1,184
FOOD AND DRUG ADMINISTRATION...........	31,325	19,767	-	11,558	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	88,688	12,798	74,862	1,028	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	664,692	128,370	393,492	138,298	4,532	1,184	-	-	-	1,184
OFFICE OF CHILD DEVELOPMENT............	1,200	-	1,200	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	18,737	-	16,572	2,165	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	2,184	917	502	-	765
DEPARTMENT OF THE INTERIOR, TOTAL......	15,386	15,359	-	-	27	20,918	6,635	14,220	40	23
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	755	755	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	793	-	793	-	-
BUREAU OF RECLAMATION..................	5	-	-	-	5	6,559	6,559	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	12,435	12,435	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	11,875	-	11,875	-	-
NATIONAL PARK SERVICE..................	207	207	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	83	-	58	25	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,984	1,962	-	-	22	1,608	76	1,494	15	23
DEPARTMENT OF JUSTICE, TOTAL...........	1,895	1,757	100	38	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	595	557	-	38	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,300	1,200	100	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	10,032	9,458	574	-	-	840	-	840	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	10,032	9,458	574	-	-	840	-	840	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	1,571	1,383	92	96	-	3,550	998	1,217	428	907
FEDERAL AVIATION ADMINISTRATION........	138	-	92	46	-	507	461	-	-	46
FEDERAL HIGHWAY ADMINISTRATION.........	123	73	-	50	-	1,484	243	1,217	-	24
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	597	597	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	301	151	-	-	150
UNITED STATES COAST GUARD..............	713	713	-	-	-	571	143	-	428	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	687	-	-	-	687
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	45,046	37,036	8,010	-	-	11,548	6,550	1,970	3,028	-
ENVIRONMENTAL PROTECTION AGENCY........	15,339	11,314	550	3,475	-	5,725	3,525	250	1,950	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	43,344	5,774	-	6,665	30,905	139,976	91,016	36,060	12,900	-
NATIONAL SCIENCE FOUNDATION............	14,762	13,762	-	-	1,000	7,576	4,986	1,844	746	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	188	115	73	-	-	55	17	26	12	-
SMITHSONIAN INSTITUTION................	-	-	-	-	-	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY.............	2,254	2,254	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	120	-	120	-	-
VETERANS ADMINISTRATION................	51,763	15,459	24,408	11,269	627	-	-	-	-	-

TABLE C-60. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN LIFE AND ENVIRONMENTAL SCIENCES BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	LIFE SCIENCES					ENVIRONMENTAL SCIENCES				
	TOTAL	BIO-LOGICAL	CLINICAL MEDICAL	OTHER MEDICAL SCIENCES	LIFE SCIENCES NEC	TOTAL	ATMOS-PHERIC	GEO-LOGICAL	OCEAN-OGRAPHY	ENVIRON-MENTAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	1,311,800	460,029	596,627	220,019	35,125	337,184	166,751	94,034	46,815	29,584
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	120,278	117,830	2,448	-	-	4,679	1,470	3,209	-	-
AGRICULTURAL RESEARCH SERVICE..........	63,760	63,760	-	-	-	1,376	164	1,212	-	-
COOPERATIVE STATE RESEARCH SERVICE.....	37,213	34,765	2,448	-	-	307	307	-	-	-
FOREST SERVICE.........................	19,305	19,305	-	-	-	2,996	999	1,997	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	33,588	33,588	-	-	-	21,788	13,141	5,610	3,037	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	33,588	33,588	-	-	-	21,788	13,141	5,610	3,037	-
DEPARTMENT OF DEFENSE, TOTAL...........	87,985	16,235	43,780	27,570	400	99,024	31,448	19,552	23,140	24,884
DEPARTMENT OF THE ARMY.................	46,577	11,269	35,008	-	300	12,600	7,323	2,422	2,455	400
DEPARTMENT OF THE NAVY.................	8,929	380	8,549	-	-	23,998	3,979	-	18,575	1,444
DEPARTMENT OF THE AIR FORCE............	27,570	-	-	27,570	-	9,500	9,500	-	-	-
DEFENSE AGENCIES.......................	4,425	4,325	-	-	100	52,926	10,646	17,130	2,110	23,040
DEPARTMENTWIDE FUNDS...................	484	261	223	-	-	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	845,733	164,685	508,737	167,835	4,476	1,279	-	-	-	1,279
FOOD AND DRUG ADMINISTRATION...........	48,667	32,122	-	16,545	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	92,304	13,197	77,982	1,125	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	682,213	119,366	410,371	148,000	4,476	1,279	-	-	-	1,279
OFFICE OF CHILD DEVELOPMENT............	1,600	-	1,600	-	-	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE......	20,949	-	18,784	2,165	-	-	-	-	-	-
DEPARTMENT OF HOUSING & URBAN DEVELOP..	-	-	-	-	-	5,032	-	2,969	-	2,063
DEPARTMENT OF THE INTERIOR, TOTAL......	16,257	16,230	-	-	27	23,984	6,276	17,640	45	23
BONNEVILLE POWER ADMINISTRATION........	-	-	-	-	-	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	739	739	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	-	-	-	-	-	775	-	775	-	-
BUREAU OF RECLAMATION..................	5	-	-	-	5	6,200	6,200	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	13,322	13,322	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	-	-	-	-	-	15,177	-	15,177	-	-
NATIONAL PARK SERVICE..................	207	207	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	155	-	125	30	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,984	1,962	-	-	22	1,677	76	1,563	15	23
DEPARTMENT OF JUSTICE, TOTAL...........	2,295	2,057	200	38	-	-	-	-	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	595	557	-	38	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,700	1,500	200	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	18,798	13,492	5,306	-	-	1,638	-	1,638	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	18,798	13,492	5,306	-	-	1,638	-	1,638	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	1,670	1,504	61	105	-	3,636	1,046	873	382	1,335
FEDERAL AVIATION ADMINISTRATION........	92	-	61	31	-	338	307	-	-	31
FEDERAL HIGHWAY ADMINISTRATION.........	186	112	-	74	-	1,284	374	873	-	37
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	756	756	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	-	-	-	-	-	476	238	-	-	238
UNITED STATES COAST GUARD..............	636	636	-	-	-	509	127	-	382	-
URBAN MASS TRANSPORTATION ADMIN........	-	-	-	-	-	1,029	-	-	-	1,029
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	47,086	38,836	8,250	-	-	10,904	5,890	2,055	2,959	-
ENVIRONMENTAL PROTECTION AGENCY........	17,785	13,060	750	3,975	-	6,925	4,025	350	2,550	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	43,101	6,723	-	8,048	28,330	149,809	97,467	39,252	13,090	-
NATIONAL SCIENCE FOUNDATION............	17,320	16,120	-	-	1,200	8,270	5,970	700	1,600	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	192	117	75	-	-	56	18	26	12	-
SMITHSONIAN INSTITUTION................	-	-	-	-	-	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY.............	2,461	2,461	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	-	-	-	-	-	160	-	160	-	-
VETERANS ADMINISTRATION................	57,251	17,091	27,020	12,448	692	-	-	-	-	-

TABLE C-61. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	1,891,496	514,016	262,144	119,226	79,427	349,483	123,719	122,845	320,636
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	20,475	-	-	2,110	2,409	39	1,161	-	14,756
AGRICULTURAL RESEARCH SERVICE..........	14,028	-	-	1,816	1,820	39	572	-	9,781
COOPERATIVE STATE RESEARCH SERVICE.....	1,440	-	-	-	-	-	-	-	1,440
FOREST SERVICE.........................	5,007	-	-	294	589	-	589	-	3,535
DEPARTMENT OF COMMERCE, TOTAL..........	21,834	-	-	1,185	11,614	2,875	721	119	5,320
MARITIME ADMINISTRATION................	12,197	-	-	-	10,719	615	-	-	863
NATIONAL BUREAU OF STANDARDS...........	7,267	-	-	-	895	1,478	318	119	4,457
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	2,370	-	-	1,185	-	782	403	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	943,046	216,554	81,557	40,972	18,592	245,402	53,131	66,464	220,374
DEPARTMENT OF THE ARMY.................	154,934	27,841	-	20,416	8,298	52,195	12,298	17,721	16,165
DEPARTMENT OF THE NAVY.................	103,555	11,971	1,007	11,879	4,314	35,577	19,483	13,425	5,899
DEPARTMENT OF THE AIR FORCE............	548,653	171,345	77,662	7,017	3,246	116,155	17,805	34,118	121,305
DEFENSE AGENCIES.......................	135,070	5,397	2,888	1,660	2,257	41,407	3,447	1,200	76,814
DEPARTMENTWIDE FUNDS...................	834	-	-	-	477	68	98	-	191
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	19,049	-	-	-	31	-	-	-	19,018
HEALTH SERVICES & MENTAL HEALTH ADMIN..	31	-	-	-	31	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	18,690	-	-	-	-	-	-	-	18,690
SOCIAL AND REHABILITATION SERVICE......	328	-	-	-	-	-	-	-	328
DEPARTMENT OF HOUSING & URBAN DEVELOP..	9,236	-	-	-	5,080	262	200	-	3,694
DEPARTMENT OF THE INTERIOR, TOTAL......	43,543	-	-	14,727	5,902	3,507	2,843	14,960	1,604
BONNEVILLE POWER ADMINISTRATION........	248	-	-	-	-	248	-	-	-
BUREAU OF MINES........................	25,636	-	-	8,171	25	1,349	1,146	14,945	-
BUREAU OF RECLAMATION..................	2,427	-	-	-	2,212	215	-	-	-
GEOLOGICAL SURVEY......................	1,525	-	-	-	1,288	-	237	-	-
OFFICE OF COAL RESEARCH................	4,955	-	-	2,185	-	1,465	1,260	-	45
OFFICE OF SALINE WATER.................	4,069	-	-	4,069	-	-	-	-	-
OFFICE OF THE SECRETARY................	153	-	-	-	-	153	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	4,530	-	-	302	2,377	77	200	15	1,559
DEPARTMENT OF JUSTICE, TOTAL...........	677	-	-	-	-	405	272	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	272	-	-	-	-	-	272	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	405	-	-	-	-	405	-	-	-
DEPARTMENT OF STATE, TOTAL.............	1,560	-	-	-	1,242	-	318	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,560	-	-	-	1,242	-	318	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	152,581	57,180	244	1,836	23,578	34,908	27,368	3,141	4,326
FEDERAL AVIATION ADMINISTRATION........	87,001	55,127	93	-	2,804	28,949	28	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	20,057	71	47	190	14,790	475	2,585	712	1,187
FEDERAL RAILROAD ADMINISTRATION........	17,635	84	-	234	-	569	14,438	-	2,310
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	12,003	-	-	479	-	1,340	8,857	984	343
OFFICE OF THE SECRETARY................	7,515	1,379	86	-	2,477	2,050	512	171	342

MARITIME ADMINISTRATION.................	12,197	-	-	-	10,719	615	-	-	863
NATIONAL BUREAU OF STANDARDS...........	7,267	-	-	-	895	1,478	318	119	4,457
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	2,370	-	-	1,185	-	782	403	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	943,046	216,554	81,557	40,972	18,592	245,402	53,131	66,464	220,374
DEPARTMENT OF THE ARMY.................	154,934	27,841	-	20,416	8,298	52,195	12,298	17,721	16,165
DEPARTMENT OF THE NAVY.................	103,555	11,971	1,007	11,879	4,314	35,577	19,483	13,425	5,899
DEPARTMENT OF THE AIR FORCE............	548,653	171,345	77,662	7,017	3,246	116,155	17,805	34,118	121,305
DEFENSE AGENCIES.......................	135,070	5,397	2,888	1,660	2,257	41,407	3,447	1,200	76,814
DEPARTMENTWIDE FUNDS...................	834	-	-	-	477	68	98	-	191
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	19,049	-	-	-	31	-	-	-	19,018
HEALTH SERVICES & MENTAL HEALTH ADMIN..	31	-	-	-	31	-	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	18,690	-	-	-	-	-	-	-	18,690
SOCIAL AND REHABILITATION SERVICE......	328	-	-	-	-	-	-	-	328
DEPARTMENT OF HOUSING & URBAN DEVELOP..	9,236	-	-	-	5,080	262	200	-	3,694
DEPARTMENT OF THE INTERIOR, TOTAL......	43,543	-	-	14,727	5,902	3,507	2,843	14,960	1,604
BONNEVILLE POWER ADMINISTRATION........	248	-	-	-	-	248	-	-	-
BUREAU OF MINES........................	25,636	-	-	8,171	25	1,349	1,146	14,945	-
BUREAU OF RECLAMATION..................	2,427	-	-	-	2,212	215	-	-	-
GEOLOGICAL SURVEY......................	1,525	-	-	-	1,288	-	237	-	-
OFFICE OF COAL RESEARCH................	4,955	-	-	2,185	-	1,465	1,260	-	45
OFFICE OF SALINE WATER.................	4,069	-	-	4,069	-	-	-	-	-
OFFICE OF THE SECRETARY................	153	-	-	-	-	153	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	4,530	-	-	302	2,377	77	200	15	1,559
DEPARTMENT OF JUSTICE, TOTAL...........	677	-	-	-	-	405	272	-	-
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	272	-	-	-	-	-	272	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	405	-	-	-	-	405	-	-	-
DEPARTMENT OF STATE, TOTAL.............	1,560	-	-	-	1,242	-	318	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,560	-	-	-	1,242	-	318	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	152,581	57,180	244	1,836	23,578	34,908	27,368	3,141	4,326
FEDERAL AVIATION ADMINISTRATION........	87,001	55,127	93	-	2,804	28,949	28	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	20,057	71	47	190	14,790	475	2,585	712	1,187
FEDERAL RAILROAD ADMINISTRATION........	17,635	84	-	234	-	569	14,438	-	2,310
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	12,003	-	-	479	-	1,340	8,857	984	343
OFFICE OF THE SECRETARY................	7,516	1,879	85	-	2,477	2,050	512	171	342
UNITED STATES COAST GUARD..............	3,342	19	19	894	659	941	753	10	47
URBAN MASS TRANSPORTATION ADMIN........	5,027	-	-	39	2,848	584	195	1,264	97
DEPARTMENT OF THE TREASURY, TOTAL......	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTINC.......	18	-	-	-	-	-	-	18	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	26,940	-	-	4,375	-	-	-	21,400	1,165
ENVIRONMENTAL PROTECTION AGENCY........	21,174	-	100	7,500	7,234	220	6,120	-	-
FEDERAL COMMUNICATIONS COMMISSION......	616	-	-	-	-	616	-	-	-
GENERAL SERVICES ADMINISTRATION........	41	-	-	-	21	-	-	-	20
NATIONAL AERONAUTICS & SPACE ADMIN.....	612,815	240,255	179,799	42,341	-	58,753	29,651	13,777	48,241
NATIONAL SCIENCE FOUNDATION............	11,491	-	-	2,740	1,716	2,185	1,909	2,941	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	183	27	27	27	26	26	25	25	-
OFFICE OF TELECOMMUNICATIONS POLICY....	177	-	-	-	-	177	-	-	-
TENNESSEE VALLEY AUTHORITY.............	3,877	-	-	1,309	1,972	-	-	-	596
US ARMS CONTROL & DISARMAMENT AGENCY...	785	-	418	104	10	-	-	-	253
UNITED STATES INFORMATION AGENCY.......	108	-	-	-	-	108	-	-	-
VETERANS ADMINISTRATION................	1,269	-	-	-	-	-	-	-	1,269

TABLE C-62. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES	1,937,676	495,632	269,141	116,823	107,433	334,220	125,953	139,244	349,230
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL	22,088	-	-	2,137	2,621	42	1,235	-	16,053
AGRICULTURAL RESEARCH SERVICE	14,885	-	-	1,816	1,979	42	593	-	10,455
COOPERATIVE STATE RESEARCH SERVICE	1,748	-	-	-	-	-	-	-	1,748
FOREST SERVICE	5,455	-	-	321	642	-	642	-	3,850
DEPARTMENT OF COMMERCE, TOTAL	28,784	-	-	1,503	11,721	3,114	4,841	824	6,781
MARITIME ADMINISTRATION	17,337	-	-	-	10,182	591	4,000	700	1,864
NATIONAL BUREAU OF STANDARDS	8,441	-	-	-	1,539	1,531	330	124	4,917
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	3,006	-	-	1,503	-	992	511	-	-
DEPARTMENT OF DEFENSE, TOTAL	968,435	217,144	81,069	36,896	22,089	242,593	50,776	71,405	246,463
DEPARTMENT OF THE ARMY	144,472	23,368	-	14,941	7,151	45,831	12,115	17,012	24,054
DEPARTMENT OF THE NAVY	120,953	13,323	825	13,213	9,335	35,474	23,966	19,311	5,506
DEPARTMENT OF THE AIR FORCE	559,188	179,525	76,919	6,695	2,859	116,187	12,280	34,687	130,036
DEFENSE AGENCIES	142,928	928	3,325	2,047	2,224	45,025	2,330	395	86,654
DEPARTMENTWIDE FUNDS	894	-	-	-	520	76	85	-	213
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	23,468	-	-	-	-	-	-	-	23,468
NATIONAL INSTITUTES OF HEALTH	22,868	-	-	-	-	-	-	-	22,868
SOCIAL AND REHABILITATION SERVICE	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP.	14,200	-	-	-	7,952	230	234	246	5,538
DEPARTMENT OF THE INTERIOR, TOTAL	49,841	-	-	17,869	7,910	1,911	3,044	16,521	2,586
BONNEVILLE POWER ADMINISTRATION	520	-	-	-	-	520	-	-	-
BUREAU OF MINES	28,049	-	-	9,288	1,346	793	1,357	15,265	-
BUREAU OF RECLAMATION	2,956	-	-	-	2,781	175	-	-	-
GEOLOGICAL SURVEY	1,504	-	-	-	1,334	-	170	-	-
OFFICE OF COAL RESEARCH	7,500	-	-	4,100	-	-	1,250	1,150	1,000
OFFICE OF SALINE WATER	4,130	-	-	4,130	-	-	-	-	-
OFFICE OF THE SECRETARY	322	-	-	-	-	252	-	70	-
OFFICE OF WATER RESOURCES RESEARCH	4,860	-	-	351	2,449	171	267	36	1,586
DEPARTMENT OF JUSTICE, TOTAL	1,600	-	-	-	-	1,100	-	500	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	1,600	-	-	-	-	1,100	-	500	-
DEPARTMENT OF STATE, TOTAL	4,387	-	-	-	1,036	-	3,351	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	4,387	-	-	-	1,036	-	3,351	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	132,162	30,721	275	2,753	37,670	23,791	27,083	4,489	5,380
FEDERAL AVIATION ADMINISTRATION	42,933	27,206	46	-	1,383	14,294	4	-	-
FEDERAL HIGHWAY ADMINISTRATION	20,813	73	50	195	15,623	490	2,435	730	1,217
FEDERAL RAILROAD ADMINISTRATION	20,375	104	-	207	-	622	16,747	-	2,695
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN.	23,832	-	-	950	11,965	2,661	5,622	1,954	680
OFFICE OF THE SECRETARY	13,237	3,309	150	-	4,362	3,610	903	301	602
UNITED STATES COAST GUARD	5,066	29	29	1,355	999	1,427	1,142	14	71
URBAN MASS TRANSPORTATION ADMIN.	5,906	-	-	46	3,338	687	230	1,490	115
DEPARTMENT OF THE TREASURY, TOTAL	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTING	18	-	-	-	-	-	-	18	-

DEPARTMENT OF COMMERCE, TOTAL..........	28,784	-	-	1,503	11,721	3,114	4,841	824	6,781
MARITIME ADMINISTRATION...............	17,337	-	-	-	10,182	591	4,000	700	1,864
NATIONAL BUREAU OF STANDARDS...........	8,441	-	-	-	1,539	1,531	330	124	4,917
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	3,006	-	-	1,503	-	992	511	-	-
DEPARTMENT OF DEFENSE, TOTAL..........	968,435	217,144	81,069	36,896	22,089	242,593	50,776	71,405	246,463
DEPARTMENT OF THE ARMY................	144,472	23,368	-	14,941	7,151	45,831	12,115	17,012	24,054
DEPARTMENT OF THE NAVY................	120,953	13,323	825	13,213	9,335	35,474	23,966	19,311	5,506
DEPARTMENT OF THE AIR FORCE...........	559,188	179,525	76,919	6,695	2,859	116,187	12,280	34,687	130,036
DEFENSE AGENCIES......................	142,928	928	3,325	2,047	2,224	45,025	2,330	395	86,654
DEPARTMENTWIDE FUNDS..................	894	-	-	-	520	76	85	-	213
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	23,468	-	-	-	-	-	-	-	23,468
NATIONAL INSTITUTES OF HEALTH..........	22,868	-	-	-	-	-	-	-	22,868
SOCIAL AND REHABILITATION SERVICE......	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP..	14,200	-	-	-	7,952	230	234	246	5,538
DEPARTMENT OF THE INTERIOR, TOTAL......	49,841	-	-	17,869	7,910	1,911	3,044	16,521	2,586
BONNEVILLE POWER ADMINISTRATION........	520	-	-	-	-	520	-	-	-
BUREAU OF MINES........................	28,049	-	-	9,288	1,346	793	1,357	15,265	-
BUREAU OF RECLAMATION..................	2,956	-	-	-	2,781	175	-	-	-
GEOLOGICAL SURVEY......................	1,504	-	-	-	1,334	-	170	-	-
OFFICE OF COAL RESEARCH................	7,500	-	-	4,100	-	-	1,250	1,150	1,000
OFFICE OF SALINE WATER.................	4,130	-	-	4,130	-	-	-	-	-
OFFICE OF THE SECRETARY................	322	-	-	-	-	252	-	70	-
OFFICE OF WATER RESOURCES RESEARCH.....	4,860	-	-	351	2,449	171	267	36	1,586
DEPARTMENT OF JUSTICE, TOTAL...........	1,600	-	-	-	-	1,100	-	500	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,600	-	-	-	-	1,100	-	500	-
DEPARTMENT OF STATE, TOTAL............	4,387	-	-	-	1,036	-	3,351	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	4,387	-	-	-	1,036	-	3,351	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	132,162	30,721	275	2,753	37,670	23,791	27,083	4,489	5,380
FEDERAL AVIATION ADMINISTRATION........	42,933	27,206	46	-	1,383	14,294	4	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	20,813	73	50	195	15,623	490	2,435	730	1,217
FEDERAL RAILROAD ADMINISTRATION........	20,375	104	-	207	-	622	16,747	-	2,695
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	23,832	-	-	950	11,965	2,661	5,622	1,954	680
OFFICE OF THE SECRETARY................	13,237	3,309	150	-	4,362	3,610	903	301	602
UNITED STATES COAST GUARD..............	5,066	29	29	1,355	999	1,427	1,142	14	71
URBAN MASS TRANSPORTATION ADMIN........	5,906	-	-	46	3,338	687	230	1,490	115
DEPARTMENT OF THE TREASURY, TOTAL......	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTING.......	18	-	-	-	-	-	-	18	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	25,998	-	-	4,431	-	-	-	20,700	867
ENVIRONMENTAL PROTECTION AGENCY........	30,037	-	95	9,240	12,222	250	8,230	-	-
FEDERAL COMMUNICATIONS COMMISSION......	774	-	-	-	-	774	-	-	-
GENERAL SERVICES ADMINISTRATION........	399	-	-	-	374	-	-	-	25
NATIONAL AERONAUTICS & SPACE ADMIN.....	610,393	247,740	187,164	37,386	-	54,522	24,793	19,716	39,072
NATIONAL SCIENCE FOUNDATION............	16,330	-	-	3,065	1,230	4,895	2,340	4,800	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	184	27	27	27	26	26	26	25	-
OFFICE OF TELECOMMUNICATIONS POLICY....	810	-	-	-	-	810	-	-	-
TENNESSEE VALLEY AUTHORITY.............	5,396	-	-	1,391	2,582	-	-	-	1,423
US ARMS CONTROL & DISARMAMENT AGENCY...	836	-	511	125	-	-	-	-	200
UNITED STATES INFORMATION AGENCY.......	162	-	-	-	-	162	-	-	-
VETERANS ADMINISTRATION................	1,374	-	-	-	-	-	-	-	1,374

TABLE C-63. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN ENGINEERING, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	AERO-NAUTICAL	ASTRO-NAUTICAL	CHEMICAL	CIVIL	ELEC-TRICAL	MECHANICAL	METALLURGY AND MATERIALS	ENGI-NEERING NEC
TOTAL, ALL AGENCIES....................	2,049,305	635,097	252,046	116,101	132,616	247,214	121,785	156,406	388,040
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	21,983	-	-	2,118	2,575	40	1,240	-	16,010
AGRICULTURAL RESEARCH SERVICE..........	14,470	-	-	1,785	1,909	40	574	-	10,162
COOPERATIVE STATE RESEARCH SERVICE.....	1,854	-	-	-	-	-	-	-	1,854
FOREST SERVICE.........................	5,659	-	-	333	666	-	666	-	3,994
DEPARTMENT OF COMMERCE, TOTAL..........	50,274	-	-	1,867	15,436	5,485	5,249	797	21,440
MARITIME ADMINISTRATION................	22,874	-	-	-	13,674	2,700	4,000	500	2,000
NATIONAL BUREAU OF STANDARDS...........	23,667	-	-	-	1,762	1,553	615	297	19,440
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	3,733	-	-	1,867	-	1,232	634	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	995,926	332,201	68,807	31,813	26,079	159,389	47,312	73,482	256,843
DEPARTMENT OF THE ARMY.................	144,027	26,300	-	9,948	10,911	45,544	11,243	17,599	22,482
DEPARTMENT OF THE NAVY.................	124,119	14,910	620	14,312	8,373	36,551	24,010	20,953	4,390
DEPARTMENT OF THE AIR FORCE............	583,443	290,391	66,762	5,953	4,398	38,371	11,982	34,930	130,656
DEFENSE AGENCIES.......................	143,471	600	1,425	1,600	1,919	38,836	-	-	99,091
DEPARTMENTWIDE FUNDS...................	866	-	-	-	478	87	77	-	224
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	25,337	-	-	-	-	-	-	-	25,337
NATIONAL INSTITUTES OF HEALTH..........	24,737	-	-	-	-	-	-	-	24,737
SOCIAL AND REHABILITATION SERVICE......	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP..	13,838	-	-	-	5,812	1,107	830	692	5,397
DEPARTMENT OF THE INTERIOR, TOTAL......	50,889	-	-	17,316	7,484	3,659	1,797	18,242	2,391
BONNEVILLE POWER ADMINISTRATION........	627	-	-	-	-	627	-	-	-
BUREAU OF MINES........................	28,420	-	-	8,210	1,265	749	1,310	16,886	-
BUREAU OF RECLAMATION..................	2,557	-	-	-	2,395	162	-	-	-
GEOLOGICAL SURVEY......................	1,585	-	-	-	1,365	-	220	-	-
OFFICE OF COAL RESEARCH................	8,505	-	-	4,700	-	1,750	-	1,250	805
OFFICE OF SALINE WATER.................	4,055	-	-	4,055	-	-	-	-	-
OFFICE OF THE SECRETARY................	270	-	-	-	-	200	-	70	-
OFFICE OF WATER RESOURCES RESEARCH.....	4,870	-	-	351	2,459	171	267	36	1,586
DEPARTMENT OF JUSTICE, TOTAL...........	1,900	-	-	300	-	1,200	-	400	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,900	-	-	300	-	1,200	-	400	-
DEPARTMENT OF STATE, TOTAL.............	1,600	-	-	-	1,150	450	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,600	-	-	-	1,150	450	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	161,932	23,626	368	3,146	53,952	22,728	43,023	6,338	8,751
FEDERAL AVIATION ADMINISTRATION........	28,531	18,071	31	-	920	9,500	9	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	33,049	112	74	299	25,071	749	3,747	1,124	1,873
FEDERAL RAILROAD ADMINISTRATION........	35,821	182	-	364	-	1,093	29,353	-	4,829
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	30,205	-	-	1,204	15,166	3,372	7,125	2,476	862
OFFICE OF THE SECRETARY................	20,944	5,236	238	-	6,902	5,712	1,428	476	952
UNITED STATES COAST GUARD..............	4,519	25	25	1,210	891	1,273	1,018	13	64
URBAN MASS TRANSPORTATION ADMIN........	8,863	-	-	69	5,002	1,029	343	2,249	171

STATE RESEARCH SERVICE.....	1,854	-	-	-	-	-	-	-	1,854
FOREST SERVICE....................	5,659	-	-	333	666	-	666	-	3,994
DEPARTMENT OF COMMERCE, TOTAL..........	50,274	-	-	1,867	15,436	5,485	5,249	797	21,440
MARITIME ADMINISTRATION................	22,874	-	-	-	13,674	2,700	4,000	500	2,000
NATIONAL BUREAU OF STANDARDS...........	23,667	-	-	-	1,762	1,553	615	297	19,440
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	3,733	-	-	1,867	-	1,232	634	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	995,926	332,201	68,807	31,813	26,079	159,389	47,312	73,482	256,843
DEPARTMENT OF THE ARMY.................	144,027	26,300	-	9,948	10,911	45,544	11,243	17,599	22,482
DEPARTMENT OF THE NAVY.................	124,119	14,910	620	14,312	8,373	36,551	24,010	20,953	4,390
DEPARTMENT OF THE AIR FORCE............	583,443	290,391	66,762	5,953	4,398	38,371	11,982	34,930	130,656
DEFENSE AGENCIES.......................	143,471	600	1,425	1,600	1,919	38,836	-	-	99,091
DEPARTMENTWIDE FUNDS...................	866	-	-	-	478	87	77	-	224
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	25,337	-	-	-	-	-	-	-	25,337
NATIONAL INSTITUTES OF HEALTH..........	24,737	-	-	-	-	-	-	-	24,737
SOCIAL AND REHABILITATION SERVICE......	600	-	-	-	-	-	-	-	600
DEPARTMENT OF HOUSING & URBAN DEVELOP..	13,838	-	-	-	5,812	1,107	830	692	5,397
DEPARTMENT OF THE INTERIOR, TOTAL......	50,889	-	-	17,316	7,484	3,659	1,797	18,242	2,391
BONNEVILLE POWER ADMINISTRATION........	627	-	-	-	-	627	-	-	-
BUREAU OF MINES........................	28,420	-	-	8,210	1,265	749	1,310	16,886	-
BUREAU OF RECLAMATION..................	2,557	-	-	-	2,395	162	-	-	-
GEOLOGICAL SURVEY......................	1,585	-	-	-	1,365	-	220	-	-
OFFICE OF COAL RESEARCH................	8,505	-	-	4,700	-	1,750	-	1,250	805
OFFICE OF SALINE WATER.................	4,055	-	-	4,055	-	-	-	-	-
OFFICE OF THE SECRETARY................	270	-	-	-	-	200	-	70	-
OFFICE OF WATER RESOURCES RESEARCH.....	4,870	-	-	351	2,459	171	267	36	1,586
DEPARTMENT OF JUSTICE, TOTAL...........	1,900	-	-	300	-	1,200	-	400	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	1,900	-	-	300	-	1,200	-	400	-
DEPARTMENT OF STATE, TOTAL.............	1,600	-	-	-	1,150	450	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,600	-	-	-	1,150	450	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	161,932	23,626	368	3,146	53,952	22,728	43,023	6,338	8,751
FEDERAL AVIATION ADMINISTRATION........	28,531	18,071	31	-	920	9,500	9	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	33,049	112	74	299	25,071	749	3,747	1,124	1,873
FEDERAL RAILROAD ADMINISTRATION........	35,821	182	-	364	-	1,093	29,353	-	4,829
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	30,205	-	-	1,204	15,166	3,372	7,125	2,476	862
OFFICE OF THE SECRETARY................	20,944	5,236	238	-	6,902	5,712	1,428	476	952
UNITED STATES COAST GUARD..............	4,519	25	25	1,210	891	1,273	1,018	13	64
URBAN MASS TRANSPORTATION ADMIN........	8,863	-	-	69	5,002	1,029	343	2,249	171
DEPARTMENT OF THE TREASURY, TOTAL......	18	-	-	-	-	-	-	18	-
BUREAU OF ENGRAVING AND PRINTING.......	18	-	-	-	-	-	-	18	-
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	26,173	-	-	4,268	-	-	-	21,000	905
ENVIRONMENTAL PROTECTION AGENCY........	34,741	200	120	11,540	14,100	300	8,481	-	-
FEDERAL COMMUNICATIONS COMMISSION......	803	-	-	-	-	803	-	-	-
GENERAL SERVICES ADMINISTRATION........	487	-	-	-	487	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	625,091	279,042	182,183	37,099	-	45,022	9,512	25,331	46,902
NATIONAL SCIENCE FOUNDATION............	28,145	-	-	5,000	3,145	5,605	4,315	10,080	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	188	28	28	27	27	26	26	26	-
OFFICE OF TELECOMMUNICATIONS POLICY....	1,300	-	-	-	-	1,300	-	-	-
TENNESSEE VALLEY AUTHORITY.............	6,071	-	-	1,497	2,369	-	-	-	2,205
US ARMS CONTROL & DISARMAMENT AGENCY...	990	-	540	110	-	-	-	-	340
UNITED STATES INFORMATION AGENCY.......	100	-	-	-	-	100	-	-	-
VETERANS ADMINISTRATION................	1,519	-	-	-	-	-	-	-	1,519

TABLE C-64. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	236,098	3,009	49,855	516	1,148	2,911	89,099	89,560
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	25,361	-	24,219	89	-	22	907	124
AGRICULTURAL RESEARCH SERVICE...........	1,130	-	1,044	-	-	-	40	46
COOPERATIVE STATE RESEARCH SERVICE.....	9,341	-	8,846	-	-	-	495	-
ECONOMIC RESEARCH SERVICE..............	10,874	-	10,607	89	-	22	78	78
FARMER COOPERATIVE SERVICE.............	814	-	814	-	-	-	-	-
FOREST SERVICE.........................	2,945	-	2,651	-	-	-	294	-
STATISTICAL REPORTING SERVICE..........	257	-	257	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	3,763	-	3,241	-	-	-	522	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	-	1,726	-	-	-	-	-
MARITIME ADMINISTRATION................	609	-	609	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	395	-	395	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,033	-	511	-	-	-	522	-
DEPARTMENT OF DEFENSE, TOTAL...........	3,649	276	848	-	-	837	1,132	556
DEPARTMENT OF THE ARMY.................	2,895	276	705	-	-	826	828	260
DEFENSE AGENCIES.......................	288	-	-	-	-	-	-	288
DEPARTMENTWIDE FUNDS...................	466	-	143	-	-	11	304	8
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	100,413	2,481	-	21	681	-	17,341	79,889
HEALTH SERVICES & MENTAL HEALTH ADMIN..	13,558	431	-	21	618	-	9,835	2,653
NATIONAL INSTITUTES OF HEALTH..........	5,481	-	-	-	-	-	-	5,481
OFFICE OF CHILD DEVELOPMENT............	5,852	2,050	-	-	-	-	3,802	-
OFFICE OF EDUCATION....................	50,258	-	-	-	63	-	-	50,195
SOCIAL AND REHABILITATION SERVICE......	14,764	-	-	-	-	-	3,704	11,060
SOCIAL SECURITY ADMINISTRATION.........	10,500	-	-	-	-	-	-	10,500
DEPARTMENT OF HOUSING & URBAN DEVELOP..	1,050	-	630	-	-	-	420	-
DEPARTMENT OF THE INTERIOR, TOTAL......	1,631	250	808	9	-	255	176	133
BUREAU OF LAND MANAGEMENT..............	57	-	57	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	185	-	50	-	-	100	20	15
BUREAU OF RECLAMATION..................	65	-	65	-	-	-	-	-
NATIONAL PARK SERVICE..................	250	250	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,074	-	636	9	-	155	156	118
DEPARTMENT OF JUSTICE, TOTAL...........	2,359	-	150	25	-	27	932	1,225
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	209	-	-	-	-	27	182	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	2,150	-	150	25	-	-	750	1,225
DEPARTMENT OF LABOR, TOTAL.............	11,120	-	10,958	-	-	-	-	162
BUREAU OF LABOR STATISTICS.............	1,450	-	1,450	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	-	1,501	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,681	-	7,681	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	-	326	-	-	-	-	-
OFFICE OF THE SECRETARY................	162	-	-	-	-	-	-	162
DEPARTMENT OF STATE, TOTAL.............	6,749	-	2,124	-	-	509	3,486	550
DEPARTMENTAL FUNDS.....................	350	-	-	-	-	-	-	350

STATISTICAL REPORTING SERVICE..........	257	-	257	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	3,763	-	3,241	-	-	-	522	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,726	-	1,726	-	-	-	-	-
MARITIME ADMINISTRATION................	609	-	609	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	395	-	395	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,033	-	511	-	-	-	522	-
DEPARTMENT OF DEFENSE, TOTAL...........	3,649	276	848	-	-	837	1,132	556
DEPARTMENT OF THE ARMY.................	2,895	276	705	-	-	826	828	260
DEFENSE AGENCIES.......................	288	-	-	-	-	-	-	288
DEPARTMENTWIDE FUNDS...................	466	-	143	-	-	11	304	8
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	100,413	2,481	-	21	681	-	17,341	79,889
HEALTH SERVICES & MENTAL HEALTH ADMIN..	13,558	431	-	21	618	-	9,835	2,653
NATIONAL INSTITUTES OF HEALTH..........	5,481	-	-	-	-	-	-	5,481
OFFICE OF CHILD DEVELOPMENT............	5,852	2,050	-	-	-	-	3,802	-
OFFICE OF EDUCATION....................	50,258	-	-	-	63	-	-	50,195
SOCIAL AND REHABILITATION SERVICE......	14,764	-	-	-	-	-	3,704	11,060
SOCIAL SECURITY ADMINISTRATION.........	10,500	-	-	-	-	-	-	10,500
DEPARTMENT OF HOUSING & URBAN DEVELOP..	1,050	-	630	-	-	-	420	-
DEPARTMENT OF THE INTERIOR, TOTAL......	1,631	250	808	9	-	255	176	133
BUREAU OF LAND MANAGEMENT..............	57	-	57	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	185	-	50	-	-	100	20	15
BUREAU OF RECLAMATION..................	65	-	65	-	-	-	-	-
NATIONAL PARK SERVICE..................	250	250	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,074	-	636	9	-	155	156	118
DEPARTMENT OF JUSTICE, TOTAL...........	2,359	-	150	25	-	27	932	1,225
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	209	-	-	-	-	27	182	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	2,150	-	150	25	-	-	750	1,225
DEPARTMENT OF LABOR, TOTAL.............	11,120	-	10,958	-	-	-	-	162
BUREAU OF LABOR STATISTICS.............	1,450	-	1,450	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,501	-	1,501	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,681	-	7,681	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	-	326	-	-	-	-	-
OFFICE OF THE SECRETARY................	162	-	-	-	-	-	-	162
DEPARTMENT OF STATE, TOTAL.............	6,749	-	2,124	-	-	589	3,486	550
DEPARTMENTAL FUNDS.....................	350	-	-	-	-	-	-	350
AGENCY FOR INTERNATIONAL DEVELOPMENT...	6,399	-	2,124	-	-	589	3,486	200
DEPARTMENT OF TRANSPORTATION, TOTAL....	7,652	-	2,962	370	467	233	3,620	-
FEDERAL AVIATION ADMINISTRATION........	2,336	-	1,869	-	467	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	973	-	712	-	-	119	142	-
FEDERAL RAILROAD ADMINISTRATION........	143	-	143	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	285	-	-	285	-	-	-	-
OFFICE OF THE SECRETARY................	384	-	43	85	-	85	171	-
URBAN MASS TRANSPORTATION ADMIN........	3,531	-	195	-	-	29	3,307	-
OTHER AGENCIES								
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	-	272	-	-	272	-	-
APPALACHIAN REGIONAL COMMISSION........	2,980	-	-	-	-	-	-	2,980
CIVIL AERONAUTICS BOARD................	277	-	277	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	802	-	615	-	-	-	187	-
FEDERAL HOME LOAN BANK BOARD...........	395	-	395	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	440	-	440	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	6,228	-	1,538	-	-	470	280	3,940
OFFICE OF ECONOMIC OPPORTUNITY.........	59,877	-	-	-	-	-	59,877	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	12	2	2	2	-	4	1	1
TENNESSEE VALLEY AUTHORITY.............	232	-	232	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	346	-	144	-	-	202	-	-
VETERANS ADMINISTRATION................	218	-	-	-	-	-	218	-

TABLE C-65. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	249,929	3,541	57,696	850	991	3,091	98,852	84,908
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	28,004	-	26,725	90	-	22	1,041	126
AGRICULTURAL RESEARCH SERVICE..........	1,419	-	1,328	-	-	-	42	49
COOPERATIVE STATE RESEARCH SERVICE.....	11,341	-	10,740	-	-	-	601	-
ECONOMIC RESEARCH SERVICE..............	10,947	-	10,681	90	-	22	77	77
FARMER COOPERATIVE SERVICE.............	827	-	827	-	-	-	-	-
FOREST SERVICE.........................	3,208	-	2,887	-	-	-	321	-
STATISTICAL REPORTING SERVICE..........	262	-	262	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	5,327	-	4,933	-	-	-	394	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	-	1,284	-	-	-	-	-
MARITIME ADMINISTRATION................	2,762	-	2,762	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	501	-	501	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	780	-	386	-	-	-	394	-
DEPARTMENT OF DEFENSE, TOTAL...........	5,384	972	1,095	-	-	953	1,370	994
DEPARTMENT OF THE ARMY.................	4,788	972	979	-	-	938	1,168	731
DEFENSE AGENCIES.......................	263	-	-	-	-	-	-	263
DEPARTMENTWIDE FUNDS...................	333	-	116	-	-	15	202	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	89,056	2,367	-	24	921	75	19,200	66,469
HEALTH SERVICES & MENTAL HEALTH ADMIN..	14,171	567	-	24	756	-	11,178	1,646
NATIONAL INSTITUTES OF HEALTH..........	6,684	-	-	-	-	-	-	6,684
OFFICE OF CHILD DEVELOPMENT............	6,300	1,800	-	-	-	-	4,500	-
OFFICE OF EDUCATION....................	43,985	-	-	-	165	75	-	43,745
SOCIAL AND REHABILITATION SERVICE......	6,037	-	-	-	-	-	3,522	2,515
SOCIAL SECURITY ADMINISTRATION.........	11,879	-	-	-	-	-	-	11,879
DEPARTMENT OF HOUSING & URBAN DEVELOP..	5,462	-	3,223	-	-	-	2,239	-
DEPARTMENT OF THE INTERIOR, TOTAL......	1,517	200	801	18	-	207	181	110
BUREAU OF LAND MANAGEMENT..............	58	-	58	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	85	-	35	5	-	25	10	10
BUREAU OF RECLAMATION..................	87	-	87	-	-	-	-	-
NATIONAL PARK SERVICE..................	200	200	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,087	-	621	13	-	182	171	100
DEPARTMENT OF JUSTICE, TOTAL...........	7,197	-	500	-	-	49	2,748	3,900
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	297	-	-	-	-	49	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	6,900	-	500	-	-	-	2,500	3,900
DEPARTMENT OF LABOR, TOTAL.............	11,602	-	11,396	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	1,576	-	1,576	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	-	1,867	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,803	-	7,803	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	-	150	-	-	-	-	-
OFFICE OF THE SECRETARY................	206	-	-	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	10,104	-	2,149	-	-	334	5,111	2,510
DEPARTMENTAL FUNDS.....................	550	-	-	-	-	-	-	550
AGENCY FOR INTERNATIONAL DEVELOPMENT...	9,554	-	2,149	-	-	334	5,111	1,960

FARMER COOPERATIVE SERVICE.............	827	-	827	-	-	-	-	-
FOREST SERVICE.........................	3,208	-	2,887	-	-	-	321	-
STATISTICAL REPORTING SERVICE..........	262	-	262	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	5,327	-	4,933	-	-	-	394	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,284	-	1,284	-	-	-	-	-
MARITIME ADMINISTRATION................	2,762	-	2,762	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	501	-	501	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	780	-	386	-	-	-	394	-
DEPARTMENT OF DEFENSE, TOTAL...........	5,334	972	1,095	-	-	953	1,370	994
DEPARTMENT OF THE ARMY.................	4,788	972	979	-	-	938	1,168	731
DEFENSE AGENCIES.......................	263	-	-	-	-	-	-	263
DEPARTMENTWIDE FUNDS...................	333	-	116	-	-	15	202	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	89,056	2,367	-	24	921	75	19,200	66,469
HEALTH SERVICES & MENTAL HEALTH ADMIN..	14,171	567	-	24	756	-	11,178	1,646
NATIONAL INSTITUTES OF HEALTH..........	6,684	-	-	-	-	-	-	6,684
OFFICE OF CHILD DEVELOPMENT............	6,300	1,800	-	-	-	-	4,500	-
OFFICE OF EDUCATION....................	43,985	-	-	-	165	75	-	43,745
SOCIAL AND REHABILITATION SERVICE......	6,037	-	-	-	-	-	3,522	2,515
SOCIAL SECURITY ADMINISTRATION.........	11,879	-	-	-	-	-	-	11,879
DEPARTMENT OF HOUSING & URBAN DEVELOP..	5,462	-	3,223	-	-	-	2,239	-
DEPARTMENT OF THE INTERIOR, TOTAL......	1,517	200	801	18	-	207	181	110
BUREAU OF LAND MANAGEMENT..............	58	-	58	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	85	-	35	5	-	25	10	10
BUREAU OF RECLAMATION..................	87	-	87	-	-	-	-	-
NATIONAL PARK SERVICE..................	200	200	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,087	-	621	13	-	182	171	100
DEPARTMENT OF JUSTICE, TOTAL...........	7,197	-	500	-	-	49	2,748	3,900
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	297	-	-	-	-	49	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	6,900	-	500	-	-	-	2,500	3,900
DEPARTMENT OF LABOR, TOTAL.............	11,602	-	11,396	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	1,576	-	1,576	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,867	-	1,867	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,803	-	7,803	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	150	-	150	-	-	-	-	-
OFFICE OF THE SECRETARY................	206	-	-	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	10,104	-	2,149	-	-	334	5,111	2,510
DEPARTMENTAL FUNDS.....................	550	-	-	-	-	-	-	550
AGENCY FOR INTERNATIONAL DEVELOPMENT...	9,554	-	2,149	-	-	334	5,111	1,960
DEPARTMENT OF TRANSPORTATION, TOTAL....	7,644	-	2,191	716	70	307	4,360	-
FEDERAL AVIATION ADMINISTRATION........	1,060	-	990	-	70	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	998	-	730	-	-	122	146	-
FEDERAL RAILROAD ADMINISTRATION........	166	-	166	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	566	-	-	566	-	-	-	-
OFFICE OF THE SECRETARY................	676	-	75	150	-	150	301	-
URBAN MASS TRANSPORTATION ADMIN........	4,178	-	230	-	-	35	3,913	-
OTHER AGENCIES								
ADVISORY COMM ON INTERGOVERNMENTAL REL.	581	-	261	-	-	320	-	-
APPALACHIAN REGIONAL COMMISSION........	2,974	-	-	-	-	-	-	2,974
CIVIL AERONAUTICS BOARD................	294	-	294	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	1,200	-	985	-	-	-	215	-
FEDERAL HOME LOAN BANK BOARD...........	503	-	503	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	580	-	580	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	10,474	-	1,656	-	-	710	490	7,618
OFFICE OF ECONOMIC OPPORTUNITY.........	61,264	-	-	-	-	-	61,264	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	12	2	2	2	-	4	1	1
TENNESSEE VALLEY AUTHORITY.............	216	-	216	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	296	-	186	-	-	110	-	-
VETERANS ADMINISTRATION................	238	-	-	-	-	-	238	-

TABLE C-66. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH IN SOCIAL SCIENCES, BY AGENCY AND DETAILED FIELD OF SCIENCE, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	ANTHRO-POLOGY	ECONOMICS	HISTORY	LIN-GUISTICS	POLITICAL SCIENCE	SOCIOLOGY	SOCIAL SCIENCES NEC
TOTAL, ALL AGENCIES....................	296,720	4,003	60,279	1,092	1,506	5,339	109,444	115,057
DEPARTMENTS								
DEPARTMENT OF AGRICULTURE, TOTAL.......	29,945	-	28,594	97	-	24	1,096	134
AGRICULTURAL RESEARCH SERVICE..........	1,713	-	1,623	-	-	-	41	49
COOPERATIVE STATE RESEARCH SERVICE.....	12,030	-	11,393	-	-	-	637	-
ECONOMIC RESEARCH SERVICE..............	11,785	-	11,494	97	-	24	85	85
FARMER COOPERATIVE SERVICE.............	827	-	827	-	-	-	-	-
FOREST SERVICE.........................	3,329	-	2,996	-	-	-	333	-
STATISTICAL REPORTING SERVICE..........	261	-	261	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	3,357	-	3,012	-	-	-	345	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,354	-	1,354	-	-	-	-	-
MARITIME ADMINISTRATION................	700	-	700	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	622	-	622	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	681	-	336	-	-	-	345	-
DEPARTMENT OF DEFENSE, TOTAL...........	7,072	1,084	730	-	-	1,365	2,988	905
DEPARTMENT OF THE ARMY.................	6,364	1,084	615	-	-	1,350	2,710	605
DEFENSE AGENCIES.......................	300	-	-	-	-	-	-	300
DEPARTMENTWIDE FUNDS...................	408	-	115	-	-	15	278	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	119,001	2,717	-	24	1,088	25	19,886	95,261
HEALTH SERVICES & MENTAL HEALTH ADMIN..	13,557	617	-	24	888	-	11,364	664
NATIONAL INSTITUTE OF EDUCATION........	51,125	-	-	-	-	-	-	51,125
NATIONAL INSTITUTES OF HEALTH..........	7,218	-	-	-	-	-	-	7,218
OFFICE OF CHILD DEVELOPMENT............	7,100	2,100	-	-	-	-	5,000	-
OFFICE OF EDUCATION....................	21,843	-	-	-	200	25	-	21,618
SOCIAL AND REHABILITATION SERVICE......	6,065	-	-	-	-	-	3,522	2,543
SOCIAL SECURITY ADMINISTRATION.........	12,093	-	-	-	-	-	-	12,093
DEPARTMENT OF HOUSING & URBAN DEVELOP..	6,290	-	1,761	-	-	944	2,390	1,195
DEPARTMENT OF THE INTERIOR, TOTAL......	1,511	200	788	13	-	197	208	105
BUREAU OF LAND MANAGEMENT..............	62	-	62	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	82	-	25	-	-	15	37	5
BUREAU OF RECLAMATION..................	80	-	80	-	-	-	-	-
NATIONAL PARK SERVICE..................	200	200	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,087	-	621	13	-	182	171	100
DEPARTMENT OF JUSTICE, TOTAL...........	8,348	-	600	-	-	-	3,148	4,600
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	248	-	-	-	-	-	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	8,100	-	600	-	-	-	2,900	4,600
DEPARTMENT OF LABOR, TOTAL.............	13,166	-	12,960	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	1,810	-	1,810	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	-	1,874	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,976	-	7,976	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	-	300	-	-	-	-	-
OFFICE OF THE SECRETARY................	1,206	-	1,000	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	13,789	-	4,645	-	-	1,170	7,224	750

DEPARTMENT OF COMMERCE, TOTAL..........	3,357	-	3,012	-	-	-	345	-
ECONOMIC DEVELOPMENT ADMINISTRATION....	1,354	-	1,354	-	-	-	-	-
MARITIME ADMINISTRATION................	700	-	700	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	622	-	622	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	681	-	336	-	-	-	345	-
DEPARTMENT OF DEFENSE, TOTAL...........	7,072	1,084	730	-	-	1,365	2,988	905
DEPARTMENT OF THE ARMY.................	6,364	1,084	615	-	-	1,350	2,710	605
DEFENSE AGENCIES.......................	300	-	-	-	-	-	-	300
DEPARTMENTWIDE FUNDS...................	408	-	115	-	-	15	278	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	119,001	2,717	-	24	1,088	25	19,886	95,261
HEALTH SERVICES & MENTAL HEALTH ADMIN..	13,557	617	-	24	888	-	11,364	664
NATIONAL INSTITUTE OF EDUCATION........	51,125	-	-	-	-	-	-	51,125
NATIONAL INSTITUTES OF HEALTH..........	7,218	-	-	-	-	-	-	7,218
OFFICE OF CHILD DEVELOPMENT............	7,100	2,100	-	-	-	-	5,000	-
OFFICE OF EDUCATION....................	21,843	-	-	-	200	25	-	21,618
SOCIAL AND REHABILITATION SERVICE......	6,065	-	-	-	-	-	3,522	2,543
SOCIAL SECURITY ADMINISTRATION.........	12,093	-	-	-	-	-	-	12,093
DEPARTMENT OF HOUSING & URBAN DEVELOP..	6,290	-	1,761	-	-	944	2,390	1,195
DEPARTMENT OF THE INTERIOR, TOTAL......	1,511	200	788	13	-	197	208	105
BUREAU OF LAND MANAGEMENT..............	62	-	62	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION...........	82	-	25	-	-	15	37	5
BUREAU OF RECLAMATION..................	80	-	80	-	-	-	-	-
NATIONAL PARK SERVICE..................	200	200	-	-	-	-	-	-
OFFICE OF WATER RESOURCES RESEARCH.....	1,087	-	621	13	-	182	171	100
DEPARTMENT OF JUSTICE, TOTAL...........	8,348	-	600	-	-	-	3,148	4,600
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	248	-	-	-	-	-	248	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	8,100	-	600	-	-	-	2,900	4,600
DEPARTMENT OF LABOR, TOTAL.............	13,166	-	12,960	-	-	-	-	206
BUREAU OF LABOR STATISTICS.............	1,810	-	1,810	-	-	-	-	-
EMPLOYMENT STANDARDS ADMINISTRATION....	1,874	-	1,874	-	-	-	-	-
MANPOWER ADMINISTRATION................	7,976	-	7,976	-	-	-	-	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	300	-	300	-	-	-	-	-
OFFICE OF THE SECRETARY................	1,206	-	1,000	-	-	-	-	206
DEPARTMENT OF STATE, TOTAL.............	13,789	-	4,645	-	-	1,170	7,224	750
DEPARTMENTAL FUNDS.....................	750	-	-	-	-	-	-	750
AGENCY FOR INTERNATIONAL DEVELOPMENT...	13,039	-	4,645	-	-	1,170	7,224	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	10,605	-	2,491	956	153	476	6,529	-
FEDERAL AVIATION ADMINISTRATION........	766	-	613	-	153	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	1,535	-	1,124	-	-	187	224	-
FEDERAL RAILROAD ADMINISTRATION........	292	-	292	-	-	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	718	-	-	718	-	-	-	-
OFFICE OF THE SECRETARY................	1,071	-	119	238	-	238	476	-
URBAN MASS TRANSPORTATION ADMIN........	6,223	-	343	-	-	51	5,829	-
OTHER AGENCIES								
ACTION.................................	25	-	20	-	5	-	-	-
ADVISORY COMM ON INTERGOVERNMENTAL REL.	567	-	283	-	-	284	-	-
APPALACHIAN REGIONAL COMMISSION........	3,000	-	-	-	-	-	-	3,000
CIVIL AERONAUTICS BOARD................	297	-	297	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	1,600	-	1,300	-	-	-	300	-
FEDERAL HOME LOAN BANK BOARD...........	582	-	582	-	-	-	-	-
FEDERAL TRADE COMMISSION...............	633	-	633	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	11,500	-	1,100	-	260	750	490	8,900
OFFICE OF ECONOMIC OPPORTUNITY.........	64,576	-	-	-	-	-	64,576	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	12	2	2	2	-	4	1	1
TENNESSEE VALLEY AUTHORITY.............	221	-	221	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	360	-	260	-	-	100	-	-
VETERANS ADMINISTRATION................	263	-	-	-	-	-	263	-

TABLE C-67. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES......................	9,399,299	2,132,427	6,003,586	404,475	148,819	329,961	171,306	157,843	40,528	10,354
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	12,750	11,684	79	-	134	-	17	-	-	836
AGRICULTURAL RESEARCH SERVICE...........	11,610	10,544	79	-	134	-	17	-	-	836
FOREST SERVICE...........................	921	921	-	-	-	-	-	-	-	-
STATISTICAL REPORTING SERVICE...........	219	219	-	-	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL...........	30,037	13,226	14,034	-	1,152	-	215	-	1,339	71
ECONOMIC DEVELOPMENT ADMINISTRATION....	2,904	673	729	-	498	-	81	-	923	-
MARITIME ADMINISTRATION.................	7,521	321	7,200	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS............	3,914	3,768	62	-	-	-	-	-	13	71
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	13,428	6,194	6,043	-	654	-	134	-	403	-
PATENT OFFICE............................	165	165	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,105	2,105	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL............	5,896,081	1,586,474	3,998,833	4,891	14,657	113,147	50,422	119,972	-	7,685
DEPARTMENT OF THE ARMY..................	1,343,224	426,758	858,582	-	2,171	28,298	15,369	8,302	-	3,744
DEPARTMENT OF THE NAVY..................	2,010,524	581,901	1,352,947	-	7,447	59,592	4,946	300	-	3,391
DEPARTMENT OF THE AIR FORCE.............	2,436,314	529,826	1,739,710	-	3,495	25,257	27,791	109,685	-	550
DEFENSE AGENCIES.........................	106,019	47,989	47,594	4,891	1,544	-	2,316	1,685	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	173,741	19,296	16,851	-	63,567	2,230	27,249	23,950	20,222	376
HEALTH SERVICES & MENTAL HEALTH ADMIN..	43,745	7,516	4,467	-	14,571	-	13,318	-	3,838	35
NATIONAL INSTITUTES OF HEALTH...........	55,100	9,316	10,808	-	25,561	214	7,398	10	1,793	-
OFFICE OF CHILD DEVELOPMENT.............	3,300	99	99	-	1,980	-	990	-	132	-
OFFICE OF EDUCATION......................	69,603	2,345	1,477	-	20,887	2,016	4,991	23,940	13,947	-
SOCIAL AND REHABILITATION SERVICE......	1,993	20	-	-	568	-	552		512	341
DEPARTMENT OF HOUSING & URBAN DEVELOP..	37,215	1,545	33,099	-	-	-	274	-	2,298	-
DEPARTMENT OF THE INTERIOR, TOTAL......	54,660	17,413	28,574	1,098	766	-	2,585	796	3,282	146
BONNEVILLE POWER ADMINISTRATION.........	1,587	845	510	-	84	-	-	-	2	146
BUREAU OF LAND MANAGEMENT...............	24	24	-	-	-	-	-	-	-	-
BUREAU OF MINES..........................	21,561	13,264	6,785	-	-	-	661	796	55	-
BUREAU OF RECLAMATION...................	90	78	-	-	12	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	2,052	2,052	-	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH.................	11,440	343	8,730	-	534	-	1,833	-	-	-
OFFICE OF SALINE WATER..................	17,906	807	12,549	1,098	136	-	91	-	3,225	-
DEPARTMENT OF JUSTICE, TOTAL............	3,796	1,034	955	-	573	-	444	-	790	-
BUREAU OF PRISONS........................	358	170	10	-	107	-	31	-	40	-
FEDERAL BUREAU OF INVESTIGATION.........	968	115	853	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN........	2,470	749	92	-	466	-	413	-	750	-
DEPARTMENT OF LABOR, TOTAL..............	9,190	2,734	832	-	2,068	-	2,398	-	1,158	-
BUREAU OF LABOR STATISTICS..............	903	903	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION.................	8,270	1,819	827	-	2,068	-	2,398	-	1,158	-
OFFICE OF THE SECRETARY.................	17	12	5	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL..............	1,078	30	-	-	765	-	255	-	-	28
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,078	30	-	-	765	-	255	-	-	28
DEPARTMENT OF TRANSPORTATION, TOTAL....	309,337	48,077	244,519	-	1,776	5,890	394	3,742	4,875	64
FEDERAL AVIATION ADMINISTRATION.........	252,775	30,620	218,413	-	-	-	-	3,742	-	-
FEDERAL HIGHWAY ADMINISTRATION..........	2,890	491	477	-	-	-	29	-	1,893	-
FEDERAL RAILROAD ADMINISTRATION.........	3,661	2,965	476	-	147	-	73	-	-	-

ECONOMIC DEVELOPMENT ADMINISTRATION....	2,904	673	729	-	499	-	61	-	923	-
MARITIME ADMINISTRATION..............	7,521	321	7,200	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	3,914	3,769	62	-	-	-	-	-	13	71
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	13,428	6,194	5,043	-	654	-	134	-	403	-
PATENT OFFICE..........................	165	165	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,105	2,105	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	5,896,081	1,586,474	3,998,833	4,891	14,657	113,147	50,422	119,972	-	7,685
DEPARTMENT OF THE ARMY.................	1,343,224	426,758	858,582	-	2,171	28,298	15,369	8,302	-	3,744
DEPARTMENT OF THE NAVY.................	2,010,524	581,901	1,352,947	-	7,447	59,592	4,946	300	-	3,391
DEPARTMENT OF THE AIR FORCE............	2,436,314	529,826	1,739,710	-	3,495	25,257	27,791	109,685	-	550
DEFENSE AGENCIES.......................	106,019	47,989	47,594	4,891	1,544	-	2,316	1,685	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	173,741	19,296	16,851	-	63,567	2,230	27,249	23,950	20,222	376
HEALTH SERVICES & MENTAL HEALTH ADMIN..	43,745	7,516	4,467	-	14,571	-	13,318	-	3,838	35
NATIONAL INSTITUTES OF HEALTH..........	55,100	9,316	10,808	-	25,561	214	7,398	10	1,793	-
OFFICE OF CHILD DEVELOPMENT............	3,300	99	99	-	1,980	-	990	-	132	-
OFFICE OF EDUCATION....................	69,603	2,345	1,477	-	20,887	2,016	4,991	23,940	13,947	-
SOCIAL AND REHABILITATION SERVICE......	1,993	20	-	-	568	-	552	-	512	341
DEPARTMENT OF HOUSING & URBAN DEVELOP..	37,215	1,545	33,099	-	-	-	274	-	2,298	-
DEPARTMENT OF THE INTERIOR, TOTAL......	54,660	17,413	28,574	1,098	766	-	2,585	796	3,282	146
BONNEVILLE POWER ADMINISTRATION........	1,587	845	510	-	84	-	-	-	2	146
BUREAU OF LAND MANAGEMENT..............	24	24	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	21,561	13,264	6,785	-	-	-	661	796	55	-
BUREAU OF RECLAMATION..................	90	78	-	-	12	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	2,052	2,052	-	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH................	11,440	343	8,730	-	534	-	1,833	-	-	-
OFFICE OF SALINE WATER.................	17,906	807	12,549	1,098	136	-	91	-	3,225	-
DEPARTMENT OF JUSTICE, TOTAL...........	3,796	1,034	955	-	573	-	444	-	790	-
BUREAU OF PRISONS......................	358	170	10	-	107	-	31	-	40	-
FEDERAL BUREAU OF INVESTIGATION........	968	115	853	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	2,470	749	92	-	466	-	413	-	750	-
DEPARTMENT OF LABOR, TOTAL.............	9,190	2,734	832	-	2,068	-	2,398	-	1,158	-
BUREAU OF LABOR STATISTICS.............	903	903	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	8,270	1,819	827	-	2,068	-	2,398	-	1,158	-
OFFICE OF THE SECRETARY................	17	12	5	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	1,078	30	-	-	765	-	255	-	-	28
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,078	30	-	-	765	-	255	-	-	28
DEPARTMENT OF TRANSPORTATION, TOTAL....	309,337	48,077	244,519	-	1,776	5,890	394	3,742	4,875	64
FEDERAL AVIATION ADMINISTRATION........	252,775	30,620	218,413	-	-	-	-	3,742	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	2,890	491	477	-	-	-	29	-	1,893	-
FEDERAL RAILROAD ADMINISTRATION........	3,661	2,965	476	-	147	-	73	-	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	12,029	2,406	9,003	-	500	-	-	-	120	-
OFFICE OF THE SECRETARY................	6,557	2,335	4,167	-	-	-	-	-	-	55
UNITED STATES COAST GUARD..............	16,838	7,072	9,757	-	-	-	-	-	-	9
URBAN MASS TRANSPORTATION ADMIN........	14,587	2,188	2,226	-	1,129	5,890	292	-	2,862	-
DEPARTMENT OF THE TREASURY, TOTAL......	418	418	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	418	418	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	873,935	11,892	262,573	396,057	4,257	187,563	3,683	7,785	101	24
CIVIL SERVICE COMMISSION...............	181	181	-	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY........	82,900	39,015	35,093	-	900	-	733	-	6,270	889
GENERAL SERVICES ADMINISTRATION........	103	69	24	-	10	-	-	-	-	-
LIBRARY OF CONGRESS....................	1,472	1,472	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,760,977	362,064	1,331,409	2,429	37,604	21,021	5,965	289	-	196
NATIONAL SCIENCE FOUNDATION............	18,656	2,090	-	-	12,919	110	2,062	1,274	193	8
OFFICE OF ECONOMIC OPPORTUNITY.........	90,036	5,569	2,753	-	7,438	-	74,241	35	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,015	1,015	-	-	-	-	-	-	-	-
POSTAL SERVICE.........................	38,733	4,803	33,586	-	-	-	313	-	-	31
TENNESSEE VALLEY AUTHORITY.............	1,829	1,829	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	354	211	143	-	-	-	-	-	-	-
UNITED STATES INFORMATION AGENCY.......	12	12	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	792	274	229	-	233	-	56	-	-	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-68. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	
TOTAL, ALL AGENCIES....................	10,071,478	2,337,143	6,415,387	438,904	157,905	340,702	149,824	145,191	65,755	20,667
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	13,948	11,960	39	-	17	-	-	-	-	1,932
AGRICULTURAL RESEARCH SERVICE..........	12,721	10,733	39	-	17	-	-	-	-	1,932
FOREST SERVICE.........................	1,002	1,002	-	-	-	-	-	-	-	-
STATISTICAL REPORTING SERVICE..........	225	225	-	-	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	29,371	15,340	10,409	-	1,615	-	870	-	1,076	61
ECONOMIC DEVELOPMENT ADMINISTRATION....	2,922	822	700	-	750	-	100	-	550	-
MARITIME ADMINISTRATION................	1,640	47	1,593	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	4,403	4,277	50	-	-	-	-	-	15	61
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	17,035	7,823	7,666	-	865	-	170	-	511	-
OFFICE OF MINORITY BUSINESS ENTERPRISE.	1,022	22	400	-	-	-	600	-	-	-
PATENT OFFICE..........................	294	294	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,055	2,055	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	6,680,635	1,764,926	4,613,346	2,000	14,167	109,801	48,174	115,430	-	12,791
DEPARTMENT OF THE ARMY.................	1,785,757	474,149	1,261,291	-	805	20,005	16,511	10,269	-	2,727
DEPARTMENT OF THE NAVY.................	2,238,233	634,814	1,520,718	-	6,109	64,036	1,772	1,120	-	9,664
DEPARTMENT OF THE AIR FORCE............	2,500,483	601,858	1,740,349	-	3,066	25,760	26,755	102,295	-	400
DEFENSE AGENCIES.......................	106,162	51,605	45,988	2,000	1,687	-	3,136	1,746	-	-
DEPARTMENTWIDE FUNDS...................	50,000	2,500	45,000	-	2,500	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	249,464	26,636	32,447	-	87,364	5,093	41,284	22,210	33,567	863
HEALTH SERVICES & MENTAL HEALTH ADMIN..	48,768	8,233	4,246	-	16,078	-	15,174	-	5,037	-
NATIONAL INSTITUTES OF HEALTH..........	104,200	15,524	26,787	-	40,603	253	18,876	50	2,107	-
OFFICE OF CHILD DEVELOPMENT............	8,000	240	400	-	4,400	-	2,400	-	560	-
OFFICE OF EDUCATION....................	85,658	2,609	1,014	-	25,607	4,840	4,177	22,160	25,251	-
SOCIAL AND REHABILITATION SERVICE......	2,838	30	-	-	676	-	657	-	612	863
DEPARTMENT OF HOUSING & URBAN DEVELOP..	31,438	1,886	22,739	-	74	-	1,572	-	5,167	-
DEPARTMENT OF THE INTERIOR, TOTAL......	69,507	23,262	37,998	1,100	3,517	-	3,228	-	-	402
BONNEVILLE POWER ADMINISTRATION........	2,800	1,667	1,013	-	65	-	-	-	-	55
BUREAU OF LAND MANAGEMENT..............	25	25	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	29,712	17,512	11,500	-	-	-	700	-	-	-
BUREAU OF RECLAMATION..................	211	161	-	-	50	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	2,158	2,158	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	1,250	405	845	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH................	13,270	382	7,158	-	3,302	-	2,428	-	-	-
OFFICE OF SALINE WATER.................	18,514	900	16,314	1,100	100	-	100	-	-	-
OFFICE OF THE SECRETARY................	1,567	52	1,168	-	-	-	-	-	-	347
DEPARTMENT OF JUSTICE, TOTAL...........	8,834	1,422	2,538	-	935	-	439	-	3,500	-
BUREAU OF PRISONS......................	384	240	15	-	60	-	39	-	30	-
FEDERAL BUREAU OF INVESTIGATION........	450	120	330	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	8,000	1,062	2,193	-	875	-	400	-	3,470	-
DEPARTMENT OF LABOR, TOTAL.............	12,240	4,038	1,052	-	2,629	-	3,049	-	1,472	-
BUREAU OF LABOR STATISTICS.............	1,443	1,443	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	10,515	2,313	1,052	-	2,629	-	3,049	-	1,472	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	230	230	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	52	52	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	1,067	30	-	-	825	-	112	-	-	100
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,067	30	-	-	825	-	112	-	-	100
DEPARTMENT OF TRANSPORTATION, TOTAL....	210,012	50,318	141,639	-	400	4,813	2,416	2,747	7,679	-
FEDERAL AVIATION ADMINISTRATION........	124,675	32,416	89,766	-	-	-	-	2,493	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	2,964	504	489	-	-	-	30	-	1,941	-
FEDERAL RAILROAD ADMINISTRATION........	4,230	2,465	1,511	-	-	-	-	254	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	23,884	4,777	18,868	-	-	-	-	-	239	-
OFFICE OF THE SECRETARY................	11,549	4,158	7,391	-	-	-	-	-	-	-
UNITED STATES COAST GUARD..............	25,524	3,420	20,062	-	-	-	2,042	-	-	-

SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,055	2,055	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	6,680,635	1,764,926	4,613,346	2,000	14,167	109,801	48,174	115,430	-	12,791
DEPARTMENT OF THE ARMY.................	1,785,757	474,149	1,261,291	-	805	20,005	16,511	10,269	-	2,727
DEPARTMENT OF THE NAVY.................	2,238,233	634,814	1,520,718	-	6,109	64,036	1,772	1,120	-	9,664
DEPARTMENT OF THE AIR FORCE............	2,500,483	601,858	1,740,349	-	3,066	25,760	26,755	102,295	-	400
DEFENSE AGENCIES.......................	106,162	51,605	45,988	2,000	1,687	-	3,136	1,746	-	-
DEPARTMENTWIDE FUNDS...................	50,000	2,500	45,000	-	2,500	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	249,464	26,636	32,447	-	87,364	5,093	41,284	22,210	33,567	863
HEALTH SERVICES & MENTAL HEALTH ADMIN..	48,768	8,233	4,246	-	16,078	-	15,174	-	5,037	-
NATIONAL INSTITUTES OF HEALTH..........	104,200	15,524	26,787	-	40,603	253	18,876	50	2,107	-
OFFICE OF CHILD DEVELOPMENT............	8,000	240	400	-	4,400	-	2,400	-	560	-
OFFICE OF EDUCATION....................	85,658	2,609	1,014	-	25,607	4,840	4,177	22,160	25,251	-
SOCIAL AND REHABILITATION SERVICE......	2,838	30	-	-	676	-	657	-	612	863
DEPARTMENT OF HOUSING & URBAN DEVELOP..	31,438	1,886	22,739	-	74	-	1,572	-	5,167	-
DEPARTMENT OF THE INTERIOR, TOTAL......	69,507	23,262	37,998	1,100	3,517	-	3,228	-	-	402
BONNEVILLE POWER ADMINISTRATION........	2,800	1,667	1,013	-	65	-	-	-	-	55
BUREAU OF LAND MANAGEMENT..............	25	25	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	29,712	17,512	11,500	-	-	-	700	-	-	-
BUREAU OF RECLAMATION..................	211	161	-	-	50	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	2,158	2,158	-	-	-	-	-	-	-	-
GEOLOGICAL SURVEY......................	1,250	405	845	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH................	13,270	382	7,158	-	3,302	-	2,428	-	-	-
OFFICE OF SALINE WATER.................	18,514	900	16,314	1,100	100	-	100	-	-	-
OFFICE OF THE SECRETARY................	1,567	52	1,168	-	-	-	-	-	-	347
DEPARTMENT OF JUSTICE, TOTAL...........	8,834	1,422	2,538	-	935	-	439	-	3,500	-
BUREAU OF PRISONS......................	384	240	15	-	60	-	39	-	30	-
FEDERAL BUREAU OF INVESTIGATION........	450	120	330	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	8,000	1,062	2,193	-	875	-	400	-	3,470	-
DEPARTMENT OF LABOR, TOTAL.............	12,240	4,038	1,052	-	2,629	-	3,049	-	1,472	-
BUREAU OF LABOR STATISTICS.............	1,443	1,443	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	10,515	2,313	1,052	-	2,629	-	3,049	-	1,472	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	230	230	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	52	52	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	1,067	30	-	-	825	-	112	-	-	100
AGENCY FOR INTERNATIONAL DEVELOPMENT...	1,067	30	-	-	825	-	112	-	-	100
DEPARTMENT OF TRANSPORTATION, TOTAL....	210,012	50,318	141,639	-	400	4,813	2,416	2,747	7,679	-
FEDERAL AVIATION ADMINISTRATION........	124,675	32,416	89,766	-	-	-	-	2,493	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	2,964	504	489	-	-	-	30	-	1,941	-
FEDERAL RAILROAD ADMINISTRATION........	4,230	2,465	1,511	-	-	-	-	254	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	23,884	4,777	18,868	-	-	-	-	-	239	-
OFFICE OF THE SECRETARY................	11,549	4,158	7,391	-	-	-	-	-	-	-
UNITED STATES COAST GUARD..............	25,524	3,420	20,062	-	-	-	2,042	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	17,186	2,578	3,552	-	400	4,813	344	-	5,499	-
DEPARTMENT OF THE TREASURY, TOTAL......	458	458	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	458	458	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	880,612	10,303	232,896	435,449	3,357	191,877	2,213	4,116	89	312
CIVIL SERVICE COMMISSION...............	646	246	-	-	-	-	-	-	400	-
ENVIRONMENTAL PROTECTION AGENCY........	108,915	44,200	47,336	-	1,100	-	733	-	11,384	4,162
GENERAL SERVICES ADMINISTRATION........	359	96	238	-	-	-	-	-	25	-
LIBRARY OF CONGRESS....................	1,189	1,189	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,630,798	363,174	1,215,955	5	19,631	28,978	3,055	-	-	-
NATIONAL SCIENCE FOUNDATION............	26,967	2,200	1,000	350	17,925	140	3,518	438	1,396	-
OFFICE OF ECONOMIC OPPORTUNITY.........	51,599	5,099	3,590	-	4,105	-	38,805	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,024	1,024	-	-	-	-	-	-	-	-
POSTAL SERVICE.........................	59,489	7,060	51,835	-	-	-	300	250	-	44
TENNESSEE VALLEY AUTHORITY.............	1,843	1,843	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	205	130	75	-	-	-	-	-	-	-
UNITED STATES INFORMATION AGENCY.......	4	1	3	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	854	302	252	-	244	-	56	-	-	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-69. FEDERAL OBLIGATIONS FOR DEVELOPMENT, BY AGENCY AND PERFORMER, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRA-MURAL (1)	EXTRAMURAL							
			UNITED STATES AND TERRITORIES							
			INDUSTRIAL FIRMS	FFRDCS ADMIN. BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN. BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN. BY NON-PROFIT INSTITUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES	10,493,910	2,324,731	6,769,046	472,848	172,960	350,875	163,930	139,728	81,903	17,889
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	15,362	11,780	39	-	17	-	-	-	-	3,526
AGRICULTURAL RESEARCH SERVICE	14,077	10,495	39	-	17	-	-	-	-	3,526
FOREST SERVICE	1,040	1,040	-	-	-	-	-	-	-	-
STATISTICAL REPORTING SERVICE	245	245	-	-	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	40,566	17,720	17,309	-	2,636	-	1,558	-	1,250	93
ECONOMIC DEVELOPMENT ADMINISTRATION	2,930	830	700	-	750	-	100	-	550	-
MARITIME ADMINISTRATION	5,600	177	5,423	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS	6,983	5,720	935	-	170	-	-	-	65	93
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	21,155	9,172	9,520	-	1,616	-	212	-	635	-
OFFICE OF MINORITY BUSINESS ENTERPRISE	2,145	68	731	-	100	-	1,246	-	-	-
PATENT OFFICE	485	485	-	-	-	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMIN.	1,268	1,268	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	6,981,225	1,743,409	4,928,767	100	13,757	115,833	45,937	126,289	-	7,133
DEPARTMENT OF THE ARMY	1,798,776	461,536	1,288,669	100	886	18,846	17,083	11,515	-	141
DEPARTMENT OF THE NAVY	2,425,373	635,203	1,700,796	-	6,577	74,237	1,108	860	-	6,592
DEPARTMENT OF THE AIR FORCE	2,616,355	601,258	1,851,277	-	2,106	22,750	24,750	113,814	-	400
DEFENSE AGENCIES	90,721	42,912	43,025	-	1,688	-	2,996	100	-	-
DEPARTMENTWIDE FUNDS	50,000	2,500	45,000	-	2,500	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	311,399	37,080	45,487	-	107,596	3,381	64,917	8,985	42,453	1,500
HEALTH SERVICES & MENTAL HEALTH ADMIN.	51,186	8,634	4,314	-	17,588	-	15,650	-	5,000	-
NATIONAL INSTITUTE OF EDUCATION	51,619	7,139	-	-	11,692	3,113	5,750	8,925	15,000	-
NATIONAL INSTITUTES OF HEALTH	146,700	19,884	39,687	-	56,157	268	28,278	60	2,366	-
OFFICE OF CHILD DEVELOPMENT	8,400	252	840	-	3,780	-	2,520	-	1,008	-
OFFICE OF EDUCATION	49,994	1,136	646	-	17,694	-	12,049	-	18,469	-
SOCIAL AND REHABILITATION SERVICE	3,500	35	-	-	685	-	670	-	610	1,500
DEPARTMENT OF HOUSING & URBAN DEVELOP.	37,740	3,908	24,531	-	243	-	1,509	-	7,549	-
DEPARTMENT OF THE INTERIOR, TOTAL	87,375	28,785	50,058	1,100	2,150	-	3,507	-	1,000	775
BONNEVILLE POWER ADMINISTRATION	2,417	1,366	1,016	-	35	-	-	-	-	-
BUREAU OF LAND MANAGEMENT	24	24	-	-	-	-	-	-	-	-
BUREAU OF MINES	40,415	21,215	17,500	-	-	-	700	-	1,000	-
BUREAU OF RECLAMATION	164	134	-	-	30	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE	3,188	3,088	-	-	100	-	-	-	-	-
GEOLOGICAL SURVEY	2,946	1,446	1,500	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH	16,800	560	11,648	-	1,885	-	2,707	-	-	-
OFFICE OF SALINE WATER	19,846	900	17,646	1,100	100	-	100	-	-	-
OFFICE OF THE SECRETARY	1,575	52	748	-	-	-	-	-	-	775
DEPARTMENT OF JUSTICE, TOTAL	10,852	2,285	3,570	-	1,875	-	220	-	2,902	-
BUREAU OF PRISONS	402	260	20	-	75	-	20	-	27	-
FEDERAL BUREAU OF INVESTIGATION	950	150	800	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.	9,500	1,875	2,750	-	1,800	-	200	-	2,875	-
DEPARTMENT OF LABOR, TOTAL	12,887	4,691	1,051	-	2,627	-	3,047	-	1,471	-
BUREAU OF LABOR STATISTICS	1,952	1,952	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION	10,507	2,311	1,051	-	2,627	-	3,047	-	1,471	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN.	376	376	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY	52	52	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL	843	30	-	-	717	-	96	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	843	30	-	-	717	-	96	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	191,407	46,996	122,759	-	400	7,201	2,382	149	11,520	-

STATISTICAL REPORTING SERVICE..........	[illegible]	[illegible]								
DEPARTMENT OF COMMERCE, TOTAL..........	40,566	17,720	17,309	-	2,636	-	1,558	-	1,250	93
ECONOMIC DEVELOPMENT ADMINISTRATION....	2,930	830	700	-	750	-	100	-	550	-
MARITIME ADMINISTRATION................	5,600	177	5,423	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	6,983	5,720	935	-	170	-	-	-	65	93
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	21,155	9,172	9,520	-	1,616	-	212	-	635	-
OFFICE OF MINORITY BUSINESS ENTERPRISE.	2,145	68	731	-	100	-	1,246	-	-	-
PATENT OFFICE..........................	485	485	-	-	-	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADMIN...	1,268	1,268	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	6,981,225	1,743,409	4,928,767	100	13,757	115,833	45,937	126,289	-	7,133
DEPARTMENT OF THE ARMY.................	1,798,776	461,536	1,288,669	100	886	18,846	17,083	11,515	-	141
DEPARTMENT OF THE NAVY.................	2,425,373	635,203	1,700,796	-	6,577	74,237	1,108	860	-	6,592
DEPARTMENT OF THE AIR FORCE............	2,616,355	601,258	1,851,277	-	2,106	22,750	24,750	113,814	-	400
DEFENSE AGENCIES.......................	90,721	42,912	43,025	-	1,688	-	2,996	100	-	-
DEPARTMENTWIDE FUNDS...................	50,000	2,500	45,000	-	2,500	-	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	311,399	37,080	45,487	-	107,596	3,381	64,917	8,985	42,453	1,500
HEALTH SERVICES & MENTAL HEALTH ADMIN..	51,186	8,634	4,314	-	17,588	-	15,650	-	5,000	-
NATIONAL INSTITUTE OF EDUCATION........	51,619	7,139	-	-	11,692	3,113	5,750	8,925	15,000	-
NATIONAL INSTITUTES OF HEALTH..........	146,700	19,884	39,687	-	56,157	268	28,278	60	2,366	-
OFFICE OF CHILD DEVELOPMENT............	8,400	252	840	-	3,780	-	2,520	-	1,008	-
OFFICE OF EDUCATION....................	49,994	1,136	646	-	17,694	-	12,049	-	18,469	-
SOCIAL AND REHABILITATION SERVICE......	3,500	35	-	-	685	-	670	-	610	1,500
DEPARTMENT OF HOUSING & URBAN DEVELOP..	37,740	3,908	24,531	-	243	-	1,509	-	7,549	-
DEPARTMENT OF THE INTERIOR, TOTAL......	87,375	28,785	50,058	1,100	2,150	-	3,507	-	1,000	775
BONNEVILLE POWER ADMINISTRATION........	2,417	1,366	1,016	-	35	-	-	-	-	-
BUREAU OF LAND MANAGEMENT..............	24	24	-	-	-	-	-	-	-	-
BUREAU OF MINES........................	40,415	21,215	17,500	-	-	-	700	-	1,000	-
BUREAU OF RECLAMATION..................	164	134	-	-	30	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	3,188	3,088	-	-	100	-	-	-	-	-
GEOLOGICAL SURVEY......................	2,946	1,446	1,500	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH................	16,800	560	11,648	-	1,885	-	2,707	-	-	-
OFFICE OF SALINE WATER.................	19,846	900	17,646	1,100	100	-	100	-	-	-
OFFICE OF THE SECRETARY................	1,575	52	748	-	-	-	-	-	-	775
DEPARTMENT OF JUSTICE, TOTAL...........	10,852	2,285	3,570	-	1,875	-	220	-	2,902	-
BUREAU OF PRISONS......................	402	260	20	-	75	-	20	-	27	-
FEDERAL BUREAU OF INVESTIGATION........	950	150	800	-	-	-	-	-	-	-
LAW ENFORCEMENT ASSISTANCE ADMIN.......	9,500	1,875	2,750	-	1,800	-	200	-	2,875	-
DEPARTMENT OF LABOR, TOTAL.............	12,887	4,691	1,051	-	2,627	-	3,047	-	1,471	-
BUREAU OF LABOR STATISTICS.............	1,952	1,952	-	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION................	10,507	2,311	1,051	-	2,627	-	3,047	-	1,471	-
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	376	376	-	-	-	-	-	-	-	-
OFFICE OF THE SECRETARY................	52	52	-	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	843	30	-	-	717	-	96	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT...	843	30	-	-	717	-	96	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL....	191,407	46,996	122,759	-	400	7,201	2,382	149	11,520	-
FEDERAL AVIATION ADMINISTRATION........	82,900	21,554	61,346	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	4,563	776	753	-	-	-	46	-	2,988	-
FEDERAL RAILROAD ADMINISTRATION........	7,437	6,024	1,264	-	-	-	-	149	-	-
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	30,272	6,054	23,915	-	-	-	-	-	303	-
OFFICE OF THE SECRETARY................	17,775	5,679	12,096	-	-	-	-	-	-	-
UNITED STATES COAST GUARD..............	22,744	3,052	17,870	-	-	-	1,822	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	25,716	3,857	5,515	-	400	7,201	514	-	8,229	-
DEPARTMENT OF THE TREASURY, TOTAL......	498	498	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	498	498	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	920,555	9,956	234,856	471,543	3,350	196,139	1,201	2,825	85	600
CIVIL SERVICE COMMISSION...............	1,010	260	-	-	-	-	-	-	750	-
ENVIRONMENTAL PROTECTION AGENCY........	109,500	47,500	44,405	-	800	-	733	-	11,900	4,162
GENERAL SERVICES ADMINISTRATION........	25	2	-	-	-	-	-	-	23	-
LIBRARY OF CONGRESS....................	1,218	1,218	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	1,628,842	350,267	1,235,567	5	13,104	28,206	1,693	-	-	-
NATIONAL SCIENCE FOUNDATION............	28,900	3,303	1,000	100	19,650	115	2,502	1,230	1,000	-
OFFICE OF ECONOMIC OPPORTUNITY.........	44,607	2,807	4,000	-	3,590	-	34,210	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,046	1,046	-	-	-	-	-	-	-	-
POSTAL SERVICE.........................	64,031	8,514	54,867	-	-	-	300	250	-	100
TENNESSEE VALLEY AUTHORITY.............	2,148	2,148	-	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGENCY...	455	130	325	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	1,419	398	455	-	448	-	118	-	-	-

(1) INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION).

TABLE C-70. FEDERAL FUNDS FOR R&D PLANT, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(MILLIONS OF DOLLARS)

AGENCY AND SUBDIVISION	OBLIGATIONS			EXPENDITURES		
	ACTUAL,1971	ESTIMATES		ACTUAL,1971	ESTIMATES	
		1972	1973		1972	1973
TOTAL, ALL AGENCIES	611.2	664.4	836.0	612.7	640.3	694.5
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	5.1	11.1	1.3	7.6	14.3	5.0
AGRICULTURAL RESEARCH SERVICE	4.1	6.0	1.3	5.1	8.9	3.4
COOPERATIVE STATE RESEARCH SERVICE	-	-	-	1.3	.4	.4
FOREST SERVICE	1.0	5.0	-	1.1	4.9	1.2
DEPARTMENT OF COMMERCE, TOTAL	9.2	7.7	16.7	4.7	7.3	9.9
MARITIME ADMINISTRATION	3.6	-	.3	-	-	.9
NATIONAL BUREAU OF STANDARDS	1.2	3.6	3.2	1.7	3.3	3.2
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	4.4	4.1	13.1	3.0	4.0	5.9
DEPARTMENT OF DEFENSE, TOTAL	153.7	176.0	199.5	144.5	157.6	180.6
DEPARTMENT OF THE ARMY	43.6	47.4	49.7	32.7	38.1	45.0
DEPARTMENT OF THE NAVY	28.0	48.4	69.7	28.4	44.1	49.7
DEPARTMENT OF THE AIR FORCE	49.7	50.6	55.5	49.7	43.8	56.4
DEFENSE AGENCIES	32.3	29.7	24.6	33.7	31.7	29.6
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	17.4	46.4	68.9	44.3	57.2	60.4
FOOD AND DRUG ADMINISTRATION	-	3.9	3.0	-	.7	5.4
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	.6	5.1	-	.5	1.0	4.1
NATIONAL INSTITUTES OF HEALTH	16.3	37.4	65.9	40.2	42.6	42.1
OFFICE OF EDUCATION	.5	-	-	3.6	12.9	8.8
DEPARTMENT OF THE INTERIOR, TOTAL	8.5	15.8	21.7	7.0	11.8	26.7
BONNEVILLE POWER ADMINISTRATION	1.0	1.3	.1	1.0	1.4	.3
BUREAU OF SPORT FISHERIES AND WILDLIFE	.2	.5	.3	.3	.4	.4
GEOLOGICAL SURVEY	-	.8	-	-	.3	.4
OFFICE OF COAL RESEARCH	2.4	10.3	20.0	3.9	6.1	21.8
OFFICE OF SALINE WATER	4.9	3.0	1.2	1.9	3.7	3.8
DEPARTMENT OF STATE, TOTAL	8.9	2.5	2.7	1.0	2.3	2.5
AGENCY FOR INTERNATIONAL DEVELOPMENT	8.9	2.5	2.7	1.0	2.3	2.5
DEPARTMENT OF TRANSPORTATION, TOTAL	10.8	31.6	60.8	9.6	27.6	38.7
FEDERAL AVIATION ADMINISTRATION	1.1	1.5	14.5	.8	1.0	4.5
FEDERAL HIGHWAY ADMINISTRATION	.4	.4	.4	.2	.4	.4
FEDERAL RAILROAD ADMINISTRATION	3.7	13.3	27.5	4.6	13.0	20.5
UNITED STATES COAST GUARD	1.6	11.4	10.9	1.6	8.3	7.3
URBAN MASS TRANSPORTATION ADMINISTRATION	4.0	5.0	7.5	2.4	4.9	6.0
DEPARTMENT OF THE TREASURY, TOTAL	*	*	*	*	*	*
BUREAU OF ENGRAVING AND PRINTING	*	*	*	*	*	*
OTHER AGENCIES						
ATOMIC ENERGY COMMISSION	312.2	283.1	285.8	302.0	272.2	244.8
ENVIRONMENTAL PROTECTION AGENCY	1.1	2.8	36.1	.4	1.0	6.6
FEDERAL COMMUNICATIONS COMMISSION	*	*	.7	*	*	.3
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	40.2	52.7	77.3	44.1	43.1	60.0
NATIONAL SCIENCE FOUNDATION	27.9	29.7	38.0	39.2	31.1	34.6
POSTAL SERVICE	.7	.2	.1	.7	.1	.1
TENNESSEE VALLEY AUTHORITY	.6	2.8	15.4	.6	2.8	15.4
VETERANS ADMINISTRATION	15.0	2.1	11.1	7.0	11.7	8.8

TABLE C-71. FEDERAL OBLIGATIONS FOR R&D PLANT, BY AGENCY AND PERFORMER OF THE RESEARCH AND DEVELOPMENT THE PLANT SUPPORTS, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	FEDERAL INTRA-MURAL	EXTRAMURAL							
			DOMESTIC							FOREIGN
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER	
TOTAL, ALL AGENCIES	611,244	199,967	56,797	110,624	49,239	178,669	2,507	3,267	1,226	8,948
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	5,104	5,104	-	-	-	-	-	-	-	-
AGRICULTURAL RESEARCH SERVICE	4,072	4,072	-	-	-	-	-	-	-	-
FOREST SERVICE	1,032	1,032	-	-	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	9,175	9,175	-	-	-	-	-	-	-	-
MARITIME ADMINISTRATION	3,600	3,600	-	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS	1,210	1,210	-	-	-	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	4,365	4,365	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	153,670	127,080	15,173	115	10,460	380	332	125	-	5
DEPARTMENT OF THE ARMY	43,628	43,628	-	-	-	-	-	-	-	-
DEPARTMENT OF THE NAVY	28,012	28,012	-	-	-	-	-	-	-	-
DEPARTMENT OF THE AIR FORCE	49,695	49,695	-	-	-	-	-	-	-	-
DEFENSE AGENCIES	32,335	5,745	15,173	115	10,460	380	332	125	-	5
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	17,362	1,742	-	-	15,169	-	-	451	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN.	618	618	-	-	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	16,293	1,124	-	-	15,169	-	-	-	-	-
OFFICE OF EDUCATION	451	-	-	-	-	-	-	451	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	8,504	1,125	7,024	-	100	-	155	-	100	-
BONNEVILLE POWER ADMINISTRATION	986	986	-	-	-	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE	239	139	-	-	-	-	-	-	100	-
OFFICE OF COAL RESEARCH	2,355	-	2,100	-	100	-	155	-	-	-
OFFICE OF SALINE WATER	4,924	-	4,924	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL	8,943	-	-	-	-	-	-	-	-	8,943
AGENCY FOR INTERNATIONAL DEVELOPMENT	8,943	-	-	-	-	-	-	-	-	8,943
DEPARTMENT OF TRANSPORTATION, TOTAL	10,788	7,085	3,703	-	-	-	-	-	-	-
FEDERAL AVIATION ADMINISTRATION	1,100	187	913	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION	380	380	-	-	-	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION	3,720	930	2,790	-	-	-	-	-	-	-
UNITED STATES COAST GUARD	1,599	1,599	-	-	-	-	-	-	-	-
URBAN MASS TRANSPORTATION ADMIN	3,989	3,989	-	-	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL	18	18	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING	18	18	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION	312,243	433	30,897	110,509	4,002	163,929	471	2,001	1	-
ENVIRONMENTAL PROTECTION AGENCY	1,087	1,087	-	-	-	-	-	-	-	-
FEDERAL COMMUNICATIONS COMMISSION	19	19	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.	40,239	29,679	-	-	-	10,560	-	-	-	-
NATIONAL SCIENCE FOUNDATION	27,852	1,180	-	-	19,508	3,800	1,549	690	1,125	-
POSTAL SERVICE	670	670	-	-	-	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY	569	569	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION	15,001	15,001	-	-	-	-	-	-	-	-

TABLE C-72. FEDERAL OBLIGATIONS FOR R&D PLANT, BY AGENCY AND PERFORMER OF THE RESEARCH AND DEVELOPMENT THE PLANT SUPPORTS, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	FEDERAL INTRA-MURAL	EXTRAMURAL							
			DOMESTIC							
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES....................	664,403	272,596	92,496	84,642	54,026	132,838	19,707	3,924	1,680	2,494
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL.......	11,060	11,060	-	-	-	-	-	-	-	-
AGRICULTURAL RESEARCH SERVICE..........	6,025	6,025	-	-	-	-	-	-	-	-
FOREST SERVICE.........................	5,035	5,035	-	-	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL..........	7,664	7,664	-	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS...........	3,573	3,573	-	-	-	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	4,091	4,091	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL...........	176,011	154,084	13,390	50	7,997	60	25	400	-	5
DEPARTMENT OF THE ARMY.................	47,353	47,353	-	-	-	-	-	-	-	-
DEPARTMENT OF THE NAVY.................	48,362	48,362	-	-	-	-	-	-	-	-
DEPARTMENT OF THE AIR FORCE............	50,562	50,562	-	-	-	-	-	-	-	-
DEFENSE AGENCIES.......................	29,734	7,807	13,390	50	7,997	60	25	400	-	5
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	46,398	14,505	-	-	17,493	-	14,400	-	-	-
FOOD AND DRUG ADMINISTRATION...........	3,935	3,935	-	-	-	-	-	-	-	-
HEALTH SERVICES & MENTAL HEALTH ADMIN..	5,076	76	-	-	-	-	5,000	-	-	-
NATIONAL INSTITUTES OF HEALTH..........	37,387	10,494	-	-	17,493	-	9,400	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL......	15,777	2,137	9,410	-	1,250	-	2,950	-	30	-
BONNEVILLE POWER ADMINISTRATION........	1,267	1,267	-	-	-	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE...	460	120	310	-	-	-	-	-	30	-
GEOLOGICAL SURVEY......................	750	750	-	-	-	-	-	-	-	-
OFFICE OF COAL RESEARCH................	10,300	-	6,100	-	1,250	-	2,950	-	-	-
OFFICE OF SALINE WATER.................	3,000	-	3,000	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL.............	2,489	-	-	-	-	-	-	-	-	2,489
AGENCY FOR INTERNATIONAL DEVELOPMENT...	2,489	-	-	-	-	-	-	-	-	2,489
DEPARTMENT OF TRANSPORTATION, TOTAL....	31,582	21,054	10,528	-	-	-	-	-	-	-
FEDERAL AVIATION ADMINISTRATION........	1,500	960	540	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION.........	400	400	-	-	-	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION........	13,318	3,330	9,988	-	-	-	-	-	-	-
UNITED STATES COAST GUARD..............	11,364	11,364	-	-	-	-	-	-	-	-
URBAN MASS TRANSPORTATION ADMIN........	5,000	5,000	-	-	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL......	15	15	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING.......	15	15	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION...............	283,134	456	58,168	84,592	4,161	132,778	1,132	1,795	52	-
ENVIRONMENTAL PROTECTION AGENCY........	2,812	2,812	-	-	-	-	-	-	-	-
FEDERAL COMMUNICATIONS COMMISSION......	40	40	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN.....	52,700	52,700	-	-	-	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION............	29,652	1,000	1,000	-	23,125	-	1,200	1,729	1,598	-
POSTAL SERVICE.........................	169	169	-	-	-	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY.............	2,800	2,800	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION................	2,100	2,100	-	-	-	-	-	-	-	-

TABLE C-73. FEDERAL OBLIGATIONS FOR R&D PLANT, BY AGENCY AND PERFORMER OF THE RESEARCH AND DEVELOPMENT THE PLANT SUPPORTS, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	FEDERAL INTRA-MURAL	EXTRAMURAL							
			DOMESTIC							
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS	OTHER	FOREIGN
TOTAL, ALL AGENCIES	835,951	390,639	102,017	86,832	69,171	144,430	31,125	6,477	2,500	2,760
DEPARTMENTS										
DEPARTMENT OF AGRICULTURE, TOTAL	1,310	1,310	-	-	-	-	-	-	-	-
AGRICULTURAL RESEARCH SERVICE	1,310	1,310	-	-	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	16,670	16,670	-	-	-	-	-	-	-	-
MARITIME ADMINISTRATION	300	300	-	-	-	-	-	-	-	-
NATIONAL BUREAU OF STANDARDS	3,231	3,231	-	-	-	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	13,139	13,139	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE, TOTAL	199,508	180,707	13,271	-	5,020	60	-	400	-	50
DEPARTMENT OF THE ARMY	49,746	49,746	-	-	-	-	-	-	-	-
DEPARTMENT OF THE NAVY	69,672	69,672	-	-	-	-	-	-	-	-
DEPARTMENT OF THE AIR FORCE	55,520	55,520	-	-	-	-	-	-	-	-
DEFENSE AGENCIES	24,570	5,769	13,271	-	5,020	60	-	400	-	50
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	68,863	18,350	-	-	25,013	-	25,500	-	-	-
FOOD AND DRUG ADMINISTRATION	3,000	3,000	-	-	-	-	-	-	-	-
NATIONAL INSTITUTES OF HEALTH	65,863	15,350	-	-	25,013	-	25,500	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	21,660	330	11,305	-	5,100	-	4,875	-	50	-
BONNEVILLE POWER ADMINISTRATION	137	137	-	-	-	-	-	-	-	-
BUREAU OF SPORT FISHERIES & WILDLIFE	348	193	105	-	-	-	-	-	50	-
OFFICE OF COAL RESEARCH	20,000	-	10,025	-	5,100	-	4,875	-	-	-
OFFICE OF SALINE WATER	1,175	-	1,175	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL	2,710	-	-	-	-	-	-	-	-	2,710
AGENCY FOR INTERNATIONAL DEVELOPMENT	2,710	-	-	-	-	-	-	-	-	2,710
DEPARTMENT OF TRANSPORTATION, TOTAL	60,820	30,190	30,630	-	-	-	-	-	-	-
FEDERAL AVIATION ADMINISTRATION	14,500	4,495	10,005	-	-	-	-	-	-	-
FEDERAL HIGHWAY ADMINISTRATION	400	400	-	-	-	-	-	-	-	-
FEDERAL RAILROAD ADMINISTRATION	27,500	6,875	20,625	-	-	-	-	-	-	-
UNITED STATES COAST GUARD	10,920	10,920	-	-	-	-	-	-	-	-
URBAN MASS TRANSPORTATION ADMIN	7,500	7,500	-	-	-	-	-	-	-	-
DEPARTMENT OF THE TREASURY, TOTAL	16	16	-	-	-	-	-	-	-	-
BUREAU OF ENGRAVING AND PRINTING	16	16	-	-	-	-	-	-	-	-
OTHER AGENCIES										
ATOMIC ENERGY COMMISSION	285,765	437	45,511	86,832	4,748	144,370	750	2,422	695	-
ENVIRONMENTAL PROTECTION AGENCY	36,094	36,094	-	-	-	-	-	-	-	-
FEDERAL COMMUNICATIONS COMMISSION	680	680	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	77,300	77,300	-	-	-	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION	38,000	2,000	1,300	-	29,290	-	-	3,655	1,755	-
POSTAL SERVICE	50	50	-	-	-	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY	15,440	15,440	-	-	-	-	-	-	-	-
VETERANS ADMINISTRATION	11,065	11,065	-	-	-	-	-	-	-	-

TABLE C-74. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

REGION AND COUNTRY	TOTAL	DEPARTMENT OF AGRICULTURE	DEPARTMENT OF DEFENSE	DEPARTMENT OF H. E. W.	DEPARTMENT OF STATE	ENVIRONMENTAL PROTECTION AGENCY	OTHER
TOTAL, ALL COUNTRIES....................	63,062	4,826	11,260	34,800	5,236	2,537	19,568
EUROPE, TOTAL..........................	27,998	1,817	4,215	17,512	-	2,376	8,356
AUSTRIA................................	64	-	58	-	-	6	-
BELGIUM................................	169	-	87	45	-	-	82
DENMARK................................	141	-	40	101	-	-	94
FINLAND................................	361	-	19	55	-	-	342
FRANCE.................................	749	2	564	96	-	-	171
ICELAND................................	80	-	-	-	-	-	80
IRELAND................................	41	-	32	9	-	-	9
ITALY..................................	1,008	1	182	278	-	-	808
NETHERLANDS............................	60	-	30	30	-	-	30
NORWAY.................................	1,164	-	1,121	43	-	-	37
POLAND.................................	4,264	820	-	3,316	-	-	2,089
PORTUGAL...............................	386	-	-	355	-	31	-
SPAIN..................................	94	-	43	26	-	-	51
SWEDEN.................................	699	-	74	496	-	-	593
SWITZERLAND............................	129	-	47	82	-	-	47
UNITED KINGDOM, TOTAL..................	2,456	-	1,688	235	-	8	684
ENGLAND................................	2,095	-	1,436	231	-	8	575
SCOTLAND...............................	51	-	16	-	-	-	35
BERMUDA................................	70	-	-	-	-	-	70
OTHER UNITED KINGDOM...................	240	-	236	4	-	-	4
WEST GERMANY...........................	383	-	230	25	-	-	153
YUGOSLAVIA.............................	15,750	994	-	12,320	-	2,331	3,086
ASIA, TOTAL............................	13,117	2,228	637	7,309	2,756	34	3,755
INDIA..................................	6,282	1,049	193	4,744	125	34	1,324
INDONESIA..............................	110	-	-	-	110	-	-
JAPAN..................................	213	1	28	168	-	-	184
SOUTH KOREA............................	266	-	166	-	100	-	-
PAKISTAN...............................	3,486	1,134	-	2,252	100	-	2,110
PHILIPPINES............................	682	-	42	55	585	-	55
TAIWAN.................................	159	-	1	8	150	-	8
THAILAND...............................	370	-	129	71	170	-	71
SOUTH VIETNAM..........................	1,494	-	78	-	1,416	-	-
OTHER ASIA.............................	55	44	-	11	-	-	3
NEAR EAST, TOTAL.......................	7,980	774	1,218	5,375	100	-	2,590
GREECE.................................	12	1	3	8	-	-	8
ISRAEL.................................	5,200	529	479	3,679	-	-	2,451
LEBANON................................	20	-	-	20	-	-	20
TURKEY.................................	111	11	-	-	100	-	-
UNITED ARAB REPUBLIC...................	2,583	179	736	1,668	-	-	111
OTHER NEAR EAST........................	54	54	-	-	-	-	-
AFRICA, TOTAL..........................	3,562	7	7	2,253	1,295	-	1,005
KENYA..................................	3	-	3	-	-	-	-
NIGERIA................................	1,195	-	-	50	1,145	-	50
SUDAN..................................	50	-	-	-	50	-	-
UGANDA.................................	238	-	-	238	-	-	238
UNION OF SOUTH AFRICA..................	82	-	-	82	-	-	82
OTHER AFRICA...........................	1,994	7	4	1,883	100	-	635
LATIN AMERICA, TOTAL...................	2,409	-	299	383	1,085	-	1,019
ARGENTINA..............................	112	-	19	88	-	-	93
BOLIVIA................................	388	-	13	-	375	-	-
BRAZIL.................................	222	-	137	53	-	-	85
CHILE..................................	33	-	-	26	-	-	27
COLOMBIA...............................	338	-	21	117	200	-	117
COSTA RICA.............................	594	-	-	11	-	-	594

SWITZERLAND	129	-	47	82	-	-	47
UNITED KINGDOM, TOTAL	2,456	-	1,688	235	-	8	684
ENGLAND	2,095	-	1,436	231	-	8	575
SCOTLAND	51	-	16	-	-	-	35
BERMUDA	70	-	-	-	-	-	70
OTHER UNITED KINGDOM	240	-	236	4	-	-	4
WEST GERMANY	383	-	230	25	-	-	153
YUGOSLAVIA	15,750	994	-	12,320	-	2,331	3,086
ASIA, TOTAL	13,117	2,228	637	7,309	2,756	34	3,755
INDIA	6,282	1,049	193	4,744	125	34	1,324
INDONESIA	110	-	-	-	110	-	-
JAPAN	213	1	28	168	-	-	184
SOUTH KOREA	266	-	166	-	100	-	-
PAKISTAN	3,486	1,134	-	2,252	100	-	2,110
PHILIPPINES	682	-	42	55	585	-	55
TAIWAN	159	-	1	8	150	-	8
THAILAND	370	-	129	71	170	-	71
SOUTH VIETNAM	1,494	-	78	-	1,416	-	-
OTHER ASIA	55	44	-	11	-	-	3
NEAR EAST, TOTAL	7,980	774	1,218	5,375	100	-	2,590
GREECE	12	1	3	8	-	-	8
ISRAEL	5,200	529	479	3,679	-	-	2,451
LEBANON	20	-	-	20	-	-	20
TURKEY	111	11	-	-	100	-	-
UNITED ARAB REPUBLIC	2,583	179	736	1,668	-	-	111
OTHER NEAR EAST	54	54	-	-	-	-	-
AFRICA, TOTAL	3,562	7	7	2,253	1,295	-	1,005
KENYA	3	-	3	-	-	-	-
NIGERIA	1,195	-	-	50	1,145	-	50
SUDAN	50	-	-	-	50	-	-
UGANDA	238	-	-	238	-	-	238
UNION OF SOUTH AFRICA	82	-	-	82	-	-	82
OTHER AFRICA	1,994	7	4	1,883	100	-	635
LATIN AMERICA, TOTAL	2,409	-	299	383	1,085	-	1,019
ARGENTINA	112	-	19	88	-	-	93
BOLIVIA	388	-	13	-	375	-	-
BRAZIL	222	-	137	53	-	-	85
CHILE	33	-	-	26	-	-	27
COLOMBIA	338	-	21	117	200	-	117
COSTA RICA	594	-	-	11	-	-	594
ECUADOR	35	-	-	-	35	-	-
MEXICO	45	-	-	30	-	-	45
PANAMA	72	-	72	-	-	-	-
PERU	62	-	37	-	25	-	-
URUGUAY	11	-	-	11	-	-	11
VENEZUELA	165	-	-	-	165	-	-
OTHER LATIN AMERICA	332	-	-	47	285	-	47
AUSTRALIA	299	-	18	125	-	-	281
CANADA	6,504	-	4,846	670	-	127	1,389
NEW ZEALAND	32	-	20	12	-	-	12
INTERNATIONAL ORGANIZATIONS	1,161	-	-	1,161	-	-	1,161

TABLE C-75. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

REGION AND COUNTRY	TOTAL	DEPARTMENT OF AGRICULTURE	DEPARTMENT OF DEFENSE	DEPARTMENT OF H. E. W.	DEPARTMENT OF STATE	ENVIRONMENTAL PROTECTION AGENCY	OTHER
TOTAL, ALL COUNTRIES	82,826	11,150	16,223	39,870	3,529	7,627	18,717
EUROPE, TOTAL	36,442	5,303	3,049	21,519	-	4,185	7,785
AUSTRIA	53	-	47	-	-	6	-
BELGIUM	157	-	93	39	-	-	64
DENMARK	131	-	32	99	-	-	86
FINLAND	99	-	19	48	-	-	80
FRANCE	268	4	75	104	-	-	159
ICELAND	71	-	-	-	-	-	71
IRELAND	63	-	55	8	-	-	8
ITALY	1,258	86	79	259	-	-	1,083
NETHERLANDS	27	-	-	27	-	-	27
NORWAY	1,256	-	1,196	55	-	-	45
POLAND	7,513	1,318	-	3,821	-	2,005	1,482
PORTUGAL	1,591	-	-	1,560	-	31	-
SPAIN	92	1	43	23	-	-	48
SWEDEN	594	-	75	519	-	-	426
SWITZERLAND	207	-	25	182	-	-	42
UNITED KINGDOM, TOTAL	1,791	49	1,103	344	-	8	433
ENGLAND	1,306	-	845	341	-	8	255
SCOTLAND	159	-	114	-	-	-	45
BERMUDA	80	-	-	-	-	-	80
OTHER UNITED KINGDOM	246	49	144	3	-	-	53
WEST GERMANY	254	3	207	27	-	-	44
YUGOSLAVIA	21,017	3,842	-	14,404	-	2,135	3,687
ASIA, TOTAL	23,025	5,068	4,279	8,543	1,915	3,055	4,083
BURMA	10	-	-	10	-	-	-
INDIA	16,334	3,616	3,219	6,258	75	3,045	3,264
INDONESIA	95	-	-	-	95	-	-
JAPAN	247	-	32	171	-	-	215
SOUTH KOREA	230	-	135	-	95	-	-
PAKISTAN	4,187	1,452	750	1,975	-	10	475
PHILIPPINES	271	-	15	56	200	-	56
TAIWAN	37	-	10	7	20	-	7
THAILAND	133	-	50	63	20	-	63
SOUTH VIETNAM	1,478	-	68	-	1,410	-	-
OTHER ASIA	3	-	-	3	-	-	3
NEAR EAST, TOTAL	7,082	295	2,691	3,457	135	260	1,779
GREECE	27	-	20	7	-	-	7
ISRAEL	2,007	50	428	1,285	-	-	789
LEBANON	18	-	-	18	-	-	18
TURKEY	135	-	-	-	135	-	-
UNITED ARAB REPUBLIC	4,645	245	2,243	2,147	-	10	965
OTHER NEAR EAST	250	-	-	-	-	250	-
AFRICA, TOTAL	4,851	484	11	3,061	1,295	-	424
KENYA	6	-	6	-	-	-	-
NIGERIA	1,189	-	-	44	1,145	-	44
SUDAN	50	-	-	-	50	-	-
UGANDA	257	-	-	257	-	-	257
UNION OF SOUTH AFRICA	73	-	-	73	-	-	73
OTHER AFRICA	3,276	484	5	2,687	100	-	50
LATIN AMERICA, TOTAL	1,990	-	304	365	184	-	1,490

FRANCE	268	4	75	104	-	-	159
ICELAND	71	-	-	-	-	-	71
IRELAND	63	-	55	8	-	-	8
ITALY	1,258	86	79	259	-	-	1,083
NETHERLANDS	27	-	-	27	-	-	27
NORWAY	1,256	-	1,196	55	-	-	45
POLAND	7,513	1,318	-	3,821	-	2,005	1,482
PORTUGAL	1,591	-	-	1,560	-	31	-
SPAIN	92	1	43	23	-	-	48
SWEDEN	594	-	75	519	-	-	426
SWITZERLAND	207	-	25	182	-	-	42
UNITED KINGDOM, TOTAL	1,791	49	1,103	344	-	8	433
ENGLAND	1,306	-	845	341	-	8	255
SCOTLAND	159	-	114	-	-	-	45
BERMUDA	80	-	-	-	-	-	80
OTHER UNITED KINGDOM	246	49	144	3	-	-	53
WEST GERMANY	254	3	207	27	-	-	44
YUGOSLAVIA	21,017	3,842	-	14,404	-	2,135	3,687
ASIA, TOTAL	23,025	5,068	4,279	8,543	1,915	3,055	4,083
BURMA	10	-	-	10	-	-	-
INDIA	16,334	3,616	3,219	6,258	75	3,045	3,264
INDONESIA	95	-	-	-	95	-	-
JAPAN	247	-	32	171	-	-	215
SOUTH KOREA	230	-	135	-	95	-	-
PAKISTAN	4,187	1,452	750	1,975	-	10	475
PHILIPPINES	271	-	15	56	200	-	56
TAIWAN	37	-	10	7	20	-	7
THAILAND	133	-	50	63	20	-	63
SOUTH VIETNAM	1,478	-	68	-	1,410	-	-
OTHER ASIA	3	-	-	3	-	-	3
NEAR EAST, TOTAL	7,082	295	2,691	3,457	135	260	1,779
GREECE	27	-	20	7	-	-	7
ISRAEL	2,007	50	428	1,285	-	-	789
LEBANON	18	-	-	18	-	-	18
TURKEY	135	-	-	-	135	-	-
UNITED ARAB REPUBLIC	4,645	245	2,243	2,147	-	10	965
OTHER NEAR EAST	250	-	-	-	-	250	-
AFRICA, TOTAL	4,851	484	11	3,061	1,295	-	424
KENYA	6	-	6	-	-	-	-
NIGERIA	1,189	-	-	44	1,145	-	44
SUDAN	50	-	-	-	50	-	-
UGANDA	257	-	-	257	-	-	257
UNION OF SOUTH AFRICA	73	-	-	73	-	-	73
OTHER AFRICA	3,276	484	5	2,687	100	-	50
LATIN AMERICA, TOTAL	1,990	-	304	365	184	-	1,490
ARGENTINA	95	-	17	78	-	-	78
BOLIVIA	50	-	10	-	40	-	-
BRAZIL	148	-	88	47	-	-	60
CHILE	30	-	-	30	-	-	18
COLOMBIA	201	-	70	111	20	-	111
COSTA RICA	682	-	-	12	-	-	682
ECUADOR	10	-	-	-	10	-	-
MEXICO	368	-	-	26	-	-	368
PANAMA	175	-	69	-	-	-	106
PERU	81	-	50	-	25	-	6
URUGUAY	10	-	-	10	-	-	10
VENEZUELA	30	-	-	-	30	-	-
OTHER LATIN AMERICA	110	-	-	51	59	-	51
AUSTRALIA	342	-	57	110	-	-	285
CANADA	7,060	-	5,817	796	-	127	852
NEW ZEALAND	26	-	15	11	-	-	11
INTERNATIONAL ORGANIZATIONS	2,008	-	-	2,008	-	-	2,008

TABLE C-76. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

REGION AND COUNTRY	TOTAL	DEPARTMENT OF AGRICULTURE	DEPARTMENT OF DEFENSE	DEPARTMENT OF H. E. W.	DEPARTMENT OF STATE	ENVIRONMENTAL PROTECTION AGENCY	OTHER
TOTAL, ALL COUNTRIES	7,875	3,039	1,637	1,427	-	315	2,790
EUROPE, TOTAL	3,644	1,534	827	649	-	256	980
AUSTRIA	38	-	38	-	-	-	-
BELGIUM	114	-	87	20	-	-	27
DENMARK	48	-	-	48	-	-	48
FINLAND	33	-	19	14	-	-	14
FRANCE	186	2	38	84	-	-	146
ICELAND	59	-	-	-	-	-	59
IRELAND	27	-	22	5	-	-	5
ITALY	210	1	139	70	-	-	66
NETHERLANDS	60	-	30	30	-	-	30
NORWAY	16	-	10	6	-	-	-
POLAND	781	661	-	-	-	-	120
SPAIN	69	-	43	26	-	-	26
SWEDEN	272	-	71	201	-	-	191
SWITZERLAND	8	-	8	-	-	-	-
UNITED KINGDOM, TOTAL	523	-	274	130	-	-	222
ENGLAND	402	-	258	130	-	-	117
SCOTLAND	51	-	16	-	-	-	35
BERMUDA	70	-	-	-	-	-	70
WEST GERMANY	59	-	48	-	-	-	11
YUGOSLAVIA	1,141	870	-	15	-	256	15
ASIA, TOTAL	1,460	1,253	100	52	-	-	107
INDIA	749	679	15	-	-	-	55
JAPAN	37	1	13	23	-	-	23
SOUTH KOREA	66	-	66	-	-	-	-
PAKISTAN	529	529	-	-	-	-	-
TAIWAN	9	-	1	8	-	-	8
THAILAND	23	-	5	18	-	-	18
OTHER ASIA	47	44	-	3	-	-	3
NEAR EAST, TOTAL	791	245	240	202	-	-	296
GREECE	4	1	3	-	-	-	-
ISRAEL	508	-	222	182	-	-	276
LEBANON	20	-	-	20	-	-	20
TURKEY	11	11	-	-	-	-	-
UNITED ARAB REPUBLIC	194	179	15	-	-	-	-
OTHER NEAR EAST	54	54	-	-	-	-	-
AFRICA, TOTAL	96	7	-	89	-	-	89
NIGERIA	50	-	-	50	-	-	50
UNION OF SOUTH AFRICA	39	-	-	39	-	-	39
OTHER AFRICA	7	7	-	-	-	-	-
LATIN AMERICA, TOTAL	665	-	101	75	-	-	564
ARGENTINA	30	-	16	9	-	-	14
BRAZIL	133	-	85	37	-	-	48
COLOMBIA	20	-	-	20	-	-	20
COSTA RICA	458	-	-	-	-	-	458
MEXICO	24	-	-	9	-	-	24
AUSTRALIA	118	-	18	100	-	-	100
CANADA	996	-	331	175	-	59	569
NEW ZEALAND	32	-	20	12	-	-	12
INTERNATIONAL ORGANIZATIONS	73	-	-	73	-	-	73

TABLE C-77. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO FOREIGN PERFORMERS, BY REGION, COUNTRY, AND AGENCY, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

REGION AND COUNTRY	TOTAL	DEPARTMENT OF AGRICULTURE	DEPARTMENT OF DEFENSE	DEPARTMENT OF H. E. W.	DEPARTMENT OF STATE	ENVIRONMENTAL PROTECTION AGENCY	OTHER
TOTAL, ALL COUNTRIES....................	12,052	7,022	1,685	1,400	-	430	2,692
EUROPE, TOTAL...........................	6,089	3,848	834	648	-	330	959
AUSTRIA.................................	34	-	34	-	-	-	-
BELGIUM.................................	110	-	93	17	-	-	17
DENMARK.................................	42	-	-	42	-	-	42
FINLAND.................................	31	-	19	12	-	-	12
FRANCE..................................	203	4	65	74	-	-	134
ICELAND.................................	50	-	-	-	-	-	50
IRELAND.................................	49	-	45	4	-	-	4
ITALY...................................	233	86	79	68	-	-	58
NETHERLANDS.............................	27	-	-	27	-	-	27
NORWAY..................................	24	-	10	14	-	-	-
POLAND..................................	999	805	-	-	-	-	194
SPAIN...................................	67	1	43	23	-	-	23
SWEDEN..................................	234	-	35	199	-	-	169
SWITZERLAND.............................	8	-	8	-	-	-	-
UNITED KINGDOM, TOTAL...................	631	49	302	155	-	-	216
ENGLAND.................................	449	-	294	155	-	-	91
SCOTLAND................................	53	-	8	-	-	-	45
BERMUDA.................................	80	-	-	-	-	-	80
OTHER UNITED KINGDOM....................	49	49	-	-	-	-	-
WEST GERMANY............................	104	3	101	-	-	-	-
YUGOSLAVIA..............................	3,243	2,900	-	13	-	330	13
ASIA, TOTAL.............................	2,677	2,445	110	46	-	41	81
INDIA...................................	2,092	2,001	15	-	-	41	35
JAPAN...................................	40	-	20	20	-	-	20
SOUTH KOREA.............................	50	-	50	-	-	-	-
PAKISTAN................................	444	444	-	-	-	-	-
TAIWAN..................................	17	-	10	7	-	-	7
THAILAND................................	31	-	15	16	-	-	16
OTHER ASIA..............................	3	-	-	3	-	-	3
NEAR EAST, TOTAL........................	867	245	303	188	-	-	301
GREECE..................................	20	-	20	-	-	-	-
ISRAEL..................................	569	-	268	170	-	-	283
LEBANON.................................	18	-	-	18	-	-	18
UNITED ARAB REPUBLIC....................	260	245	15	-	-	-	-
AFRICA, TOTAL...........................	563	484	-	79	-	-	79
NIGERIA.................................	44	-	-	44	-	-	44
UNION OF SOUTH AFRICA...................	35	-	-	35	-	-	35
OTHER AFRICA............................	484	484	-	-	-	-	-
LATIN AMERICA, TOTAL....................	1,027	-	40	67	-	-	987
ARGENTINA...............................	23	-	15	8	-	-	8
BRAZIL..................................	71	-	25	33	-	-	46
COLOMBIA................................	18	-	-	18	-	-	18
COSTA RICA..............................	565	-	-	-	-	-	565
MEXICO..................................	350	-	-	8	-	-	350
AUSTRALIA...............................	145	-	57	88	-	-	88
CANADA..................................	594	-	326	209	-	59	122
NEW ZEALAND.............................	26	-	15	11	-	-	11
INTERNATIONAL ORGANIZATIONS.............	64	-	-	64	-	-	64

TABLE C-78. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	ACTUAL, 1971		ESTIMATES			
			1972		1973	
	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM
TOTAL, ALL AGENCIES	63,062	39,162	82,826	60,720	93,597	74,039
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	4,826	4,826	11,150	11,150	20,352	20,352
AGRICULTURAL RESEARCH SERVICE	4,826	4,826	11,150	11,150	20,352	20,352
DEPARTMENT OF COMMERCE, TOTAL	925	651	660	610	1,229	1,179
MARITIME ADMINISTRATION	250	-	50	-	50	-
NATIONAL BUREAU OF STANDARDS	620	596	510	510	768	768
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	55	55	100	100	411	411
DEPARTMENT OF DEFENSE, TOTAL	11,260	923	16,223	6,195	10,731	4,237
DEPARTMENT OF THE ARMY	4,844	-	3,709	-	1,172	-
DEPARTMENT OF THE NAVY	3,522	923	9,812	6,195	6,734	4,237
DEPARTMENT OF THE AIR FORCE	2,038	-	1,800	-	1,900	-
DEFENSE AGENCIES	856	-	902	-	925	-
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	34,800	29,629	39,870	33,539	42,049	35,611
FOOD AND DRUG ADMINISTRATION	616	616	5,442	5,442	5,526	5,526
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	15,008	14,645	12,138	11,307	12,323	11,385
NATIONAL INSTITUTES OF HEALTH	15,165	10,357	14,290	8,790	14,200	8,700
SOCIAL AND REHABILITATION SERVICE	4,011	4,011	8,000	8,000	10,000	10,000
DEPARTMENT OF THE INTERIOR, TOTAL	218	-	711	500	1,000	1,000
BONNEVILLE POWER ADMINISTRATION	146	-	55	-	-	-
GEOLOGICAL SURVEY	-	-	106	-	-	-
OFFICE OF SALINE WATER	72	-	50	-	-	-
OFFICE OF THE SECRETARY	-	-	500	500	1,000	1,000
DEPARTMENT OF STATE, TOTAL	5,236	-	3,529	-	4,197	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	5,236	-	3,529	-	4,197	-
DEPARTMENT OF TRANSPORTATION, TOTAL	68	-	-	-	-	-
OFFICE OF THE SECRETARY	55	-	-	-	-	-
UNITED STATES COAST GUARD	13	-	-	-	-	-
OTHER AGENCIES						
ATOMIC ENERGY COMMISSION	600	-	844	-	1,210	-
ENVIRONMENTAL PROTECTION AGENCY	2,537	2,365	7,627	7,455	6,832	6,660
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1,793	-	897	-	897	-
NATIONAL SCIENCE FOUNDATION	768	768	1,271	1,271	5,000	5,000
POSTAL SERVICE	31	-	44	-	100	-

TABLE C-79. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	ACTUAL, 1971		ESTIMATES			
			1972		1973	
	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM
TOTAL, ALL AGENCIES	7,875	4,169	12,052	8,743	20,080	16,578
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	3,039	3,039	7,022	7,022	12,817	12,817
AGRICULTURAL RESEARCH SERVICE	3,039	3,039	7,022	7,022	12,817	12,817
DEPARTMENT OF COMMERCE, TOTAL	73	55	100	100	411	411
NATIONAL BUREAU OF STANDARDS	18	-	-	-	-	-
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	55	55	100	100	411	411
DEPARTMENT OF DEFENSE, TOTAL	1,637	-	1,685	-	1,907	-
DEPARTMENT OF THE ARMY	648	-	617	-	815	-
DEPARTMENT OF THE NAVY	131	-	148	-	142	-
DEPARTMENT OF THE AIR FORCE	858	-	900	-	950	-
DEFENSE AGENCIES	-	-	20	-	-	-
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	1,427	-	1,400	-	1,394	-
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	94	-	223	-	217	-
NATIONAL INSTITUTES OF HEALTH	1,333	-	1,177	-	1,177	-
DEPARTMENT OF THE INTERIOR, TOTAL	72	-	50	-	-	-
OFFICE OF SALINE WATER	72	-	50	-	-	-
OTHER AGENCIES						
ATOMIC ENERGY COMMISSION	107	-	94	-	121	-
ENVIRONMENTAL PROTECTION AGENCY	315	315	430	350	430	350
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	445	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION	760	760	1,271	1,271	3,000	3,000

TABLE C-80. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	ACTUAL, 1971		ESTIMATES			
			1972		1973	
	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM
TOTAL, ALL AGENCIES	44,833	31,964	50,107	38,479	55,628	43,230
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	951	951	2,196	2,196	4,009	4,009
AGRICULTURAL RESEARCH SERVICE	951	951	2,196	2,196	4,009	4,009
DEPARTMENT OF COMMERCE, TOTAL	781	525	499	449	725	675
MARITIME ADMINISTRATION	250	-	50	-	50	-
NATIONAL BUREAU OF STANDARDS	531	525	449	449	675	675
DEPARTMENT OF DEFENSE, TOTAL	1,938	-	1,747	-	1,691	-
DEPARTMENT OF THE ARMY	452	-	365	-	216	-
DEPARTMENT OF THE AIR FORCE	630	-	500	-	550	-
DEFENSE AGENCIES	856	-	882	-	925	-
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	32,997	29,288	37,607	32,676	39,155	34,111
FOOD AND DRUG ADMINISTRATION	616	616	5,442	5,442	5,526	5,526
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	14,879	14,645	11,915	11,307	12,106	11,385
NATIONAL INSTITUTES OF HEALTH	13,832	10,357	13,113	8,790	13,023	8,700
SOCIAL AND REHABILITATION SERVICE	3,670	3,670	7,137	7,137	8,500	8,500
DEPARTMENT OF THE INTERIOR, TOTAL	-	-	259	153	225	225
GEOLOGICAL SURVEY	-	-	106	-	-	-
OFFICE OF THE SECRETARY	-	-	153	153	225	225
DEPARTMENT OF STATE, TOTAL	5,208	-	3,429	-	4,197	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	5,208	-	3,429	-	4,197	-
DEPARTMENT OF TRANSPORTATION, TOTAL	4	-	-	-	-	-
UNITED STATES COAST GUARD	4	-	-	-	-	-
OTHER AGENCIES						
ATOMIC ENERGY COMMISSION	469	-	438	-	489	-
ENVIRONMENTAL PROTECTION AGENCY	1,333	1,200	3,035	3,005	2,240	2,210
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	1,152	-	897	-	897	-
NATIONAL SCIENCE FOUNDATION	-	-	-	-	2,000	2,000

TABLE C-81. FEDERAL OBLIGATIONS FOR DEVELOPMENT TO FOREIGN PERFORMERS AND AMOUNT SUPPORTED THROUGH THE SPECIAL FOREIGN CURRENCY PROGRAM, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	ACTUAL, 1971		ESTIMATES			
			1972		1973	
	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM	TOTAL	SPECIAL FOREIGN CURRENCY PROGRAM
TOTAL, ALL AGENCIES	10,354	3,029	20,667	13,498	17,889	14,231
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	836	836	1,932	1,932	3,526	3,526
AGRICULTURAL RESEARCH SERVICE	836	836	1,932	1,932	3,526	3,526
DEPARTMENT OF COMMERCE, TOTAL	71	71	61	61	93	93
NATIONAL BUREAU OF STANDARDS	71	71	61	61	93	93
DEPARTMENT OF DEFENSE, TOTAL	7,685	923	12,791	6,195	7,133	4,237
DEPARTMENT OF THE ARMY	3,744	-	2,727	-	141	-
DEPARTMENT OF THE NAVY	3,391	923	9,664	6,195	6,592	4,237
DEPARTMENT OF THE AIR FORCE	550	-	400	-	400	-
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	376	341	863	863	1,500	1,500
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	35	-	-	-	-	-
SOCIAL AND REHABILITATION SERVICE	341	341	863	863	1,500	1,500
DEPARTMENT OF THE INTERIOR, TOTAL	146	-	402	347	775	775
BONNEVILLE POWER ADMINISTRATION	146	-	55	-	-	-
OFFICE OF THE SECRETARY	-	-	347	347	775	775
DEPARTMENT OF STATE, TOTAL	28	-	100	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	28	-	100	-	-	-
DEPARTMENT OF TRANSPORTATION, TOTAL	64	-	-	-	-	-
OFFICE OF THE SECRETARY	55	-	-	-	-	-
UNITED STATES COAST GUARD	9	-	-	-	-	-
OTHER AGENCIES						
ATOMIC ENERGY COMMISSION	24	-	312	-	600	-
ENVIRONMENTAL PROTECTION AGENCY	889	850	4,162	4,100	4,162	4,100
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	196	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION	8	8	-	-	-	-
POSTAL SERVICE	31	-	44	-	100	-

Table C-82. Federal obligations for research, development, and R&D plant, by geographic division and State, fiscal year 1971

[Thousands of dollars]

Geographic division and State	Research, development, and R&D plant	Research and development	R&D plant
United States, total	15,825,852	15,239,833	586,019
New England	1,164,501	1,148,827	15,674
Connecticut	151,453	149,937	1,516
Maine	13,591	13,591	---------
Massachusetts	896,689	886,989	9,700
New Hampshire	36,014	34,042	1,972
Rhode Island	52,604	50,535	2,069
Vermont	14,150	13,733	417
Middle Atlantic	2,469,178	2,413,512	55,666
New Jersey	750,178	745,131	5,047
New York	1,153,338	1,119,482	33,856
Pennsylvania	565,662	548,899	16,763
East North Central	1,221,801	1,121,677	[illegible]00,124
Illinois	334,312	249,089	85,223
Indiana	75,371	74,581	790
Michigan	188,168	187,265	903
Ohio	528,207	518,133	10,074
Wisconsin	95,743	92,609	3,134
West North Central	796,795	785,993	10,802
Iowa	34,394	32,893	1,501
Kansas	24,547	24,335	212
Minnesota	106,877	102,812	4,065
Missouri	599,131	596,917	2,214
Nebraska	11,591	10,406	1,185
North Dakota	9,188	9,063	125
South Dakota	11,067	9,567	1,500
South Atlantic	3,301,611	3,224,586	77,025
Delaware	12,951	12,951	---------
District of Columbia	483,288	478,162	5,126
Florida	921,191	890,381	30,810
Georgia	81,014	78,751	2,263
Maryland	1,230,901	1,201,248	29,653
North Carolina	83,121	82,715	406
South Carolina	24,716	23,382	1,334
Virginia	431,906	424,880	7,026
West Virginia	32,523	32,116	407
East South Central	636,507	618,235	18,272
Alabama	363,955	360,011	3,944
Kentucky	23,309	23,030	279
Mississippi	47,070	46,696	374
Tennessee	202,173	188,498	13,675
West South Central	744,862	733,149	11,713

Illinois	334,312	249,089	85,223
Indiana	75,371	74,581	790
Michigan	188,168	187,265	903
Ohio	528,207	518,133	10,074
Wisconsin	95,743	92,609	3,134
West North Central	796,795	785,993	10,802
Iowa	34,394	32,893	1,501
Kansas	24,547	24,335	212
Minnesota	106,877	102,812	4,065
Missouri	599,131	596,917	2,214
Nebraska	11,591	10,406	1,185
North Dakota	9,188	9,063	125
South Dakota	11,067	9,567	1,500
South Atlantic	3,301,611	3,224,586	77,025
Delaware	12,951	12,951	---------
District of Columbia	483,288	478,162	5,126
Florida	921,191	890,381	30,810
Georgia	81,014	78,751	2,263
Maryland	1,230,901	1,201,248	29,653
North Carolina	83,121	82,715	406
South Carolina	24,716	23,382	1,334
Virginia	431,906	424,880	7,026
West Virginia	32,523	32,116	407
East South Central	636,507	618,235	18,272
Alabama	363,955	360,011	3,944
Kentucky	23,309	23,030	279
Mississippi	47,070	46,696	374
Tennessee	202,173	188,498	13,675
West South Central	744,862	733,149	11,713
Arkansas	20,852	20,822	30
Louisiana	95,243	90,111	5,132
Oklahoma	26,411	26,332	79
Texas	602,356	595,884	6,472
Mountain	1,229,805	1,127,394	102,411
Arizona.	89,980	88,723	1,257
Colorado	272,421	264,187	8,234
Idaho	95,612	75,287	20,325
Montana	18,108	17,592	516
Nevada	175,943	159,040	16,903
New Mexico	512,815	458,674	54,141
Utah	56,393	55,789	604
Wyoming	8,533	8,102	431
Pacific	4,183,233	4,004,921	178,312
Alaska	59,587	58,200	1,387
California	3,415,163	3,295,379	119,784
Hawaii	40,562	38,332	2,230
Oregon	43,067	41,853	1,214
Washington	624,854	571,157	53,697
Outlying Areas	23,789	18,612	5,177
Offices Abroad	53,770	42,927	10,843

TABLE C-83. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY STATE AND PERFORMER

FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS)	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NONPROFIT INSTI-TUTIONS	FFRDCS ADMIN BY NONPROFIT INSTI-TUTIONS	OTHER
TOTAL, ALL STATES	15,239,833	4,045,757	7,553,880	480,150	1,618,997	728,317	471,999	209,907	130,826
CALIFORNIA	3,295,379	508,651	2,044,939	29,025	235,445	289,361	70,516	96,039	21,403
MARYLAND	1,201,248	747,208	327,870	-	47,029	58,330	10,235	6,250	4,326
NEW YORK	1,119,482	73,869	646,096	62,054	179,337	54,922	84,232	2,851	16,121
FLORIDA	890,381	357,914	496,985	-	32,019	-	1,602	-	1,861
MASS	886,989	176,453	399,934	-	159,397	62,082	46,449	37,432	5,242
NEW JERSEY	745,131	143,572	557,600	-	25,672	9,500	6,312	-	2,475
MISSOURI	596,917	26,418	523,845	-	32,683	-	6,089	4,695	3,187
TEXAS	595,884	176,723	329,199	-	69,704	671	11,891	2,160	5,536
WASHINGTON	571,157	17,430	442,121	45,661	38,818	1,957	5,284	14,592	5,294
PENN	548,899	98,612	259,788	66,516	82,035	9,321	21,519	3,526	7,582
OHIO	518,133	226,896	203,825	5,629	47,091	-	29,607	938	4,147
DIST OF COL	478,162	344,374	76,893	-	17,161	-	32,437	229	7,068
NEW MEXICO	458,674	168,626	47,502	125,342	9,432	99,679	6,355	1,060	678
VIRGINIA	424,880	266,523	101,458	-	17,612	1,371	6,783	29,225	1,908
ALABAMA	360,011	199,255	139,212	-	14,701	-	6,236	-	607
COLORADO	264,187	58,472	148,045	-	31,960	16,186	7,667	-	1,857
ILLINOIS	249,089	30,773	24,879	-	87,708	76,020	25,287	201	4,221
TENNESSEE	188,498	9,733	66,557	80,914	22,054	2,796	5,462	-	982
MICHIGAN	187,265	20,302	101,306	-	58,087	-	4,436	-	3,134
NEVADA	159,040	37,430	107,273	4,283	2,894	6,287	569	-	304
CONNECTICUT	149,937	5,997	107,052	1,526	31,702	-	2,197	-	1,463
MINNESOTA	102,812	9,872	51,494	-	27,520	-	8,572	521	4,833
WISCONSIN	92,609	8,279	35,851	-	43,595	1,503	2,283	-	1,098
LOUISIANA	90,111	17,677	51,261	-	15,652	-	3,354	-	2,167
ARIZONA	88,723	30,991	30,125	-	12,600	6,073	7,556	-	1,378
N CAROLINA	82,715	30,386	4,903	-	40,582	-	4,573	1,170	1,101
GEORGIA	78,751	26,858	26,434	-	19,990	-	3,170	360	1,939
IDAHO	75,287	4,858	297	50,535	2,363	14,581	802	1,363	478
INDIANA	74,581	7,251	35,806	-	28,325	91	914	-	2,194
ALASKA	58,200	16,852	26,987	-	9,025	-	3,409	-	1,927
UTAH	55,789	22,895	9,695	-	21,417	-	1,097	-	685
RHODE ISL	50,535	27,367	8,003	-	10,684	-	3,777	-	704
MISSISSIPPI	46,696	19,892	17,863	-	6,498	-	1,292	-	1,151
OREGON	41,853	12,216	677	-	20,258	485	4,546	1,850	1,821
HAWAII	38,332	6,473	18,399	-	11,491	-	1,382	-	587
NEW HAMP	34,042	3,638	19,096	-	7,695	-	3,310	-	303
IOWA	32,893	5,827	1,586	-	17,855	6,814	498	-	313
W VIRGINIA	32,116	7,892	9,872	-	5,666	6,400	600	929	757
OKLAHOMA	26,332	7,766	4,825	-	9,399	-	3,668	-	674
KANSAS	24,335	2,750	8,534	-	12,158	-	319	-	574
S CAROLINA	23,382	5,718	671	8,665	5,865	-	1,812	-	651
KENTUCKY	23,030	7,653	572	-	9,145	-	5,030	-	630
ARKANSAS	20,822	1,676	8,529	-	5,992	-	4,270	-	355
MONTANA	17,592	6,783	1,026	-	3,356	-	5,487	-	940
VERMONT	13,733	716	6,687	-	4,176	-	1,874	-	280
MAINE	13,591	2,208	3,589	-	2,262	-	4,693	-	839
DELAWARE	12,951	509	8,394	-	2,409	-	1,123	-	516
NEBRASKA	10,406	3,321	255	-	5,849	-	243	-	738
S DAKOTA	9,567	1,999	3,435	-	3,563	-	91	-	479
N DAKOTA	9,063	5,301	716	-	2,608	-	66	-	372
WYOMING	8,102	4,755	79	-	2,821	-	40	-	407
OUT AREAS	18,612	6,362	1,479	-	5,510	3,887	835	-	539
OFF ABROAD	42,927	33,775	4,361	-	127	-	148	4,516	-

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION)

NOTE- THE OBLIGATIONS OF THE ELEVEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 98 PERCENT OF TOTAL FEDERAL R&D OBLIGATIONS IN FY 1971.

TABLE C-83A. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT

TO EACH PERFORMER, BY STATE, FISCAL YEAR 1971

STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS)	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NONPROFIT INSTITUTIONS	FFRDCS ADMIN BY NONPROFIT INSTITUTIONS	OTHER
TOTAL, ALL STATES	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CALIFORNIA	21.6	12.6	27.1	6.0	14.5	39.7	14.9	45.8	16.4
MARYLAND	7.9	18.5	4.3	-	2.9	8.0	2.2	3.0	3.3
NEW YORK	7.3	1.8	8.6	12.9	11.1	7.5	17.8	1.4	12.3
FLORIDA	5.8	8.8	6.6	-	2.0	-	.3	-	1.4
MASS	5.8	4.4	5.3	-	9.8	8.5	9.8	17.8	4.0
NEW JERSEY	4.9	3.5	7.4	-	1.6	1.3	1.3	-	1.9
MISSOURI	3.9	.7	6.9	-	2.0	-	1.3	2.2	2.4
TEXAS	3.9	4.4	4.4	-	4.3	.1	2.5	1.0	4.2
WASHINGTON	3.7	.4	5.9	9.5	2.4	.3	1.1	7.0	4.0
PENN	3.6	2.4	3.4	13.9	5.1	1.3	4.6	1.7	5.8
OHIO	3.4	5.6	2.7	1.2	2.9	-	6.3	.4	3.2
DIST OF COL	3.1	8.5	1.0	-	1.1	-	6.9	.1	5.4
NEW MEXICO	3.0	4.2	.6	26.1	.6	13.7	1.3	.5	.5
VIRGINIA	2.8	6.6	1.3	-	1.1	.2	1.4	13.9	1.5
ALABAMA	2.4	4.9	1.8	-	.9	-	1.3	-	.5
COLORADO	1.7	1.4	2.0	-	2.0	2.2	1.6	-	1.4
ILLINOIS	1.6	.8	.3	-	5.4	10.4	5.4	.1	3.2
TENNESSEE	1.2	.2	.9	16.9	1.4	.4	1.2	-	.8
MICHIGAN	1.2	.5	1.3	-	3.6	-	.9	-	2.4
NEVADA	1.0	.9	1.4	.9	.2	.9	.1	-	.2
CONNECTICUT	1.0	.1	1.4	.3	2.0	-	.5	-	1.1
MINNESOTA	.7	.2	.7	-	1.7	-	1.8	.2	3.7
WISCONSIN	.6	.2	.5	-	2.7	.2	.5	-	.8
LOUISIANA	.6	.4	.7	-	1.0	-	.7	-	1.7
ARIZONA	.6	.8	.4	-	.8	.8	1.6	-	1.1
N CAROLINA	.5	.8	.1	-	2.5	-	1.0	.6	.8
GEORGIA	.5	.7	.3	-	1.2	-	.7	.2	1.5
IDAHO	.5	.1	*	10.5	.1	2.0	.2	.6	.4
INDIANA	.5	.2	.5	-	1.7	*	.2	-	1.7
ALASKA	.4	.4	.4	-	.6	-	.7	-	1.5
UTAH	.4	.6	.1	-	1.3	-	.2	-	.5
RHODE ISL	.3	.7	.1	-	.7	-	.8	-	.5
MISSISSIPPI	.3	.5	.2	-	.4	-	.3	-	.9
OREGON	.3	.3	*	-	1.3	.1	1.0	.9	1.4
HAWAII	.3	.2	.2	-	.7	-	.3	-	.4
NEW HAMP	.2	.1	.3	-	.5	-	.7	-	.2
IOWA	.2	.1	*	-	1.1	.9	.1	-	.2
W VIRGINIA	.2	.2	.1	-	.3	.9	.1	.4	.6
OKLAHOMA	.2	.2	.1	-	.6	-	.8	-	.5
KANSAS	.2	.1	.1	-	.8	-	.1	-	.4
S CAROLINA	.2	.1	*	1.8	.4	-	.4	-	.5
KENTUCKY	.2	.2	*	-	.6	-	1.1	-	.5
ARKANSAS	.1	*	.1	-	.4	-	.9	-	.3
MONTANA	.1	.2	*	-	.2	-	1.2	-	.7
VERMONT	.1	*	.1	-	.3	-	.4	-	.2
MAINE	.1	.1	*	-	.1	-	1.0	-	.6
DELAWARE	.1	*	.1	-	.1	-	.2	-	.4
NEBRASKA	.1	.1	*	-	.4	-	.1	-	.6
S DAKOTA	.1	*	*	-	.2	-	*	-	.4
N DAKOTA	.1	.1	*	-	.2	-	*	-	.3
WYOMING	.1	.1	*	-	.2	-	*	-	.3
OUT AREAS	.1	.2	*	-	.3	.5	.2	-	.4
OFF ABROAD	.3	.8	.1	-	*	-	*	2.2	-

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION)

TABLE C-83B. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT

TO EACH STATE, BY PERFORMER, FISCAL YEAR 1971

STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS)	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NONPROFIT INSTITUTIONS	FFRDCS ADMIN BY NONPROFIT INSTITUTIONS	OTHER
TOTAL, ALL STATES	100.0	26.5	49.6	3.2	10.6	4.8	3.1	1.4	.9
CALIFORNIA	100.0	15.4	62.1	.9	7.1	8.8	2.1	2.9	.6
MARYLAND	100.0	62.2	27.3	-	3.9	4.9	.9	.5	.4
NEW YORK	100.0	6.6	57.7	5.5	16.0	4.9	7.5	.3	1.4
FLORIDA	100.0	40.2	55.8	-	3.6	-	.2	-	.2
MASS	100.0	19.9	45.1	-	18.0	7.0	5.2	4.2	.6
NEW JERSEY	100.0	19.3	74.8	-	3.4	1.3	.8	-	.3
MISSOURI	100.0	4.4	87.8	-	5.5	-	1.0	.8	.5
TEXAS	100.0	29.7	55.2	-	11.7	.1	2.0	.4	.9
WASHINGTON	100.0	3.1	77.4	8.0	6.8	.3	.9	2.6	.9
PENN	100.0	18.0	47.3	12.1	14.9	1.7	3.9	.6	1.4
OHIO	100.0	43.8	39.3	1.1	9.1	-	5.7	.2	.8
DIST OF COL	100.0	72.0	16.1	-	3.6	-	6.8	*	1.5
NEW MEXICO	100.0	36.8	10.4	27.3	2.1	21.7	1.4	.2	.1
VIRGINIA	100.0	62.7	23.9	-	4.1	.3	1.6	6.9	.4
ALABAMA	100.0	55.3	38.7	-	4.1	-	1.7	-	.2
COLORADO	100.0	22.1	56.0	-	12.1	6.1	2.9	-	.7
ILLINOIS	100.0	12.4	10.0	-	35.2	30.5	10.2	.1	1.7
TENNESSEE	100.0	5.2	35.3	42.9	11.7	1.5	2.9	-	.5
MICHIGAN	100.0	10.8	54.1	-	31.0	-	2.4	-	1.7
NEVADA	100.0	23.5	67.5	2.7	1.8	4.0	.4	-	.2
CONNECTICUT	100.0	4.0	71.4	1.0	21.1	-	1.5	-	1.0
MINNESOTA	100.0	9.6	50.1	-	26.8	-	8.3	.5	4.7
WISCONSIN	100.0	8.9	38.7	-	47.1	1.6	2.5	-	1.2
LOUISIANA	100.0	19.6	56.9	-	17.4	-	3.7	-	2.4
ARIZONA	100.0	34.9	34.0	-	14.2	6.8	8.5	-	1.6
N CAROLINA	100.0	36.7	5.9	-	49.1	-	5.5	1.4	1.3
GEORGIA	100.0	34.1	33.6	-	25.4	-	4.0	.5	2.5
IDAHO	100.0	6.5	.4	67.1	3.1	19.4	1.1	1.8	.6
INDIANA	100.0	9.7	48.0	-	38.0	.1	1.2	-	2.9
ALASKA	100.0	29.0	46.4	-	15.5	-	5.9	-	3.3
UTAH	100.0	41.0	17.4	-	38.4	-	2.0	-	1.2
RHODE ISL	100.0	54.2	15.8	-	21.1	-	7.5	-	1.4
MISSISSIPPI	100.0	42.6	38.3	-	13.9	-	2.8	-	2.5
OREGON	100.0	29.2	1.6	-	48.4	1.2	10.9	4.4	4.4
HAWAII	100.0	16.9	48.0	-	30.0	-	3.6	-	1.5
NEW HAMP	100.0	10.7	56.1	-	22.6	-	9.7	-	.9
IOWA	100.0	17.7	4.8	-	54.3	20.7	1.5	-	1.0
W VIRGINIA	100.0	24.6	30.7	-	17.6	19.9	1.9	2.9	2.4
OKLAHOMA	100.0	29.5	18.3	-	35.7	-	13.9	-	2.6
KANSAS	100.0	11.3	35.1	-	50.0	-	1.3	-	2.4
S CAROLINA	100.0	24.5	2.9	37.1	25.1	-	7.7	-	2.8
KENTUCKY	100.0	33.2	2.5	-	39.7	-	21.8	-	2.7
ARKANSAS	100.0	8.0	41.0	-	28.8	-	20.5	-	1.7
MONTANA	100.0	38.6	5.8	-	19.1	-	31.2	-	5.3
VERMONT	100.0	5.2	48.7	-	30.4	-	13.6	-	2.0
MAINE	100.0	16.2	26.4	-	16.6	-	34.5	-	6.2
DELAWARE	100.0	3.9	64.8	-	18.6	-	8.7	-	4.0
NEBRASKA	100.0	31.9	2.5	-	56.2	-	2.3	-	7.1
S DAKOTA	100.0	20.9	35.9	-	37.2	-	1.0	-	5.0
N DAKOTA	100.0	58.5	7.9	-	28.8	-	.7	-	4.1
WYOMING	100.0	58.7	1.0	-	34.8	-	.5	-	5.0
OUT AREAS	100.0	34.2	7.9	-	29.6	20.9	4.5	-	2.9
OFF ABROAD	100.0	78.7	10.2	-	.3	-	.3	10.5	-

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION)

TABLE C-84. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY STATE AND AGENCY

FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS)	TOTAL	DEPT. OF AGRICULTURE	DEPT. OF COMMERCE	DEPT. OF DEFENSE	DEPT. OF HEALTH, EDUCATION & WELFARE	DEPT. OF INTERIOR	DEPT. OF TRANSPORTATION	ATOMIC ENERGY COMMISSION	NATIONAL AERONAUTICS & SPACE ADMIN	NATIONAL SCIENCE FOUNDATION	OTHER (1)
TOT, ALL ST	15,239,833	300,076	142,786	7,497,776	1,441,271	193,513	482,448	1,302,326	3,256,134	336,174	287,329
CALIFORNIA	3,295,379	19,035	5,940	1,984,619	166,288	16,423	41,310	271,749	715,128	49,516	25,371
MARYLAND	1,201,248	40,969	40,871	498,296	297,935	7,725	10,073	9,055	278,993	9,773	7,558
NEW YORK	1,119,482	8,340	3,385	599,997	156,233	3,170	18,035	127,359	137,663	31,801	33,499
FLORIDA	890,381	7,602	4,884	492,974	16,802	1,738	4,789	1,755	346,033	10,536	3,268
MASS	886,989	1,312	4,989	564,330	97,478	4,532	83,300	15,132	77,705	25,494	12,747
NEW JERSEY	745,131	1,394	10,130	599,640	17,848	6,702	4,690	12,982	78,595	7,979	5,171
MISSOURI	596,917	3,789	2,122	340,661	32,367	2,983	401	330	206,481	3,589	4,194
TEXAS	595,884	10,727	3,895	176,073	44,212	4,690	19,190	3,742	319,351	9,367	4,637
WASHINGTON	571,157	5,621	9,347	263,118	28,734	5,106	170,753	64,844	12,693	6,927	4,014
PENN	548,899	10,600	202	223,648	74,275	20,411	3,508	102,391	87,973	16,330	9,561
OHIO	518,133	4,373	388	274,585	38,740	2,026	57,895	13,537	108,172	6,776	11,641
DIST OF COL	478,162	22,088	3,220	248,662	43,205	12,533	22,185	2,109	81,338	10,859	31,963
NEW MEXICO	458,674	1,771	640	210,524	3,300	2,736	924	221,139	14,739	1,664	1,237
VIRGINIA	424,880	2,533	2,429	241,983	16,696	5,401	7,993	2,148	130,773	2,661	12,263
ALABAMA	360,011	3,221	21	76,884	13,165	1,620	647	105	258,736	209	5,403
COLORADO	264,187	5,015	19,120	41,190	17,668	16,224	10,519	1,997	124,471	21,585	6,398
ILLINOIS	249,089	11,696	524	59,431	45,406	3,898	6,508	85,312	11,229	15,223	9,862
TENNESSEE	188,498	2,689	114	49,059	19,333	2,153	507	97,046	6,496	4,907	6,194
MICHIGAN	187,265	4,167	74	77,661	31,195	3,699	3,783	4,465	43,531	12,265	6,425
NEVADA	159,040	778	416	25,333	658	4,583	-	123,151	2,878	494	749
CONNECTICUT	149,937	1,513	596	84,587	21,388	536	1,220	6,316	26,550	6,223	1,008
MINNESOTA	102,812	5,741	16	47,507	28,895	3,888	1,054	2,357	7,837	2,510	3,007
WISCONSIN	92,609	9,400	245	17,631	23,129	1,626	395	4,429	21,217	5,338	9,199
LOUISIANA	90,111	15,011	2,797	1,063	11,424	811	948	326	52,958	2,334	2,439
ARIZONA	88,723	5,780	118	44,234	7,102	3,186	2,147	385	10,369	8,299	7,103
N CAROLINA	82,715	5,964	245	8,040	36,010	2,290	467	1,815	2,512	5,506	19,866
GEORGIA	78,751	12,497	1,822	21,139	23,684	1,261	1,758	939	8,017	3,149	4,485
IDAHO	75,287	3,835	421	123	918	1,575	24	66,993	245	903	250
INDIANA	74,581	3,081	3	41,479	12,930	473	680	3,194	5,038	6,930	773
ALASKA	58,200	1,695	10,792	5,815	2,334	4,918	22	25,882	636	1,947	4,159
UTAH	55,789	3,032	26	29,454	8,688	4,437	138	1,354	2,194	3,885	2,581
RHODE ISL	50,535	511	540	35,229	5,608	456	578	572	499	3,290	3,252
MISSISSIPPI	46,696	9,642	1,451	7,761	3,684	370	294	48	21,203	547	1,696
OREGON	41,853	5,492	3,228	1,959	17,302	4,783	189	1,055	701	4,769	2,375
HAWAII	38,332	1,398	787	21,167	4,779	844	153	1,144	3,498	3,578	984
NEW HAMP	34,042	1,274	258	19,945	6,650	334	1,693	89	1,609	2,076	114
IOWA	32,893	7,416	27	2,509	9,180	544	131	6,892	2,323	2,992	879
W VIRGINIA	32,116	2,798	433	7,247	3,515	7,423	389	20	252	7,912	2,127
OKLAHOMA	26,332	2,834	25	5,179	4,601	3,023	1,661	77	3,108	1,726	4,098
KANSAS	24,335	2,443	5	7,528	8,774	724	114	512	1,788	1,951	496
S CAROLINA	23,382	4,026	58	2,959	2,486	429	267	8,817	361	1,543	2,436
KENTUCKY	23,030	3,198	158	6,029	4,489	1,377	303	585	1,177	952	4,762
ARKANSAS	20,822	1,959	641	6,802	6,512	724	130	2,275	77	302	1,400
MONTANA	17,592	3,741	959	1,856	7,140	2,348	133	46	23	928	418
VERMONT	13,733	1,344	2	5,631	4,194	394	-	37	125	300	706
MAINE	13,591	1,267	2,329	829	2,946	585	174	88	2,502	329	2,542
DELAWARE	12,951	669	300	1,037	739	992	-	19	6,760	1,756	679
NEBRASKA	10,406	3,798	445	305	4,131	632	93	37	102	521	342
S DAKOTA	9,567	2,092	2	99	590	5,471	87	11	476	671	68
N DAKOTA	9,063	4,633	238	281	1,111	2,506	114	52	14	114	-
WYOMING	8,102	1,038	339	77	422	4,897	82	23	75	970	179
OUT AREAS	18,612	2,656	769	4,592	2,993	1,303	-	1,073	507	3,968	751
OFF ABROAD	42,927	578	-	8,045	1,385	-	-	4,516	28,403	-	-

NOTE- THE OBLIGATIONS OF THE ELEVEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 98 PERCENT OF TOTAL FEDERAL R&D OBLIGATIONS IN FY 1971.

(1) OTHER - INCLUDES ENVIRONMENTAL PROTECTION AGENCY AND OFFICE OF ECONOMIC OPPORTUNITY

TABLE C-84A. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT OF EACH AGENCY, BY STATE, FISCAL YEAR 1971

STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS)	TOTAL	DEPT. OF AGRICULTURE	DEPT. OF COMMERCE	DEPT. OF DEFENSE	DEPT. OF HEALTH, EDUCATION & WELFARE	DEPT. OF INTERIOR	DEPT. OF TRANSPORTATION	ATOMIC ENERGY COMMISSION	NATIONAL AERONAUTICS & SPACE ADMIN	NATIONAL SCIENCE FOUNDATION	OTHER (1)
TOT, ALL ST	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CALIFORNIA	21.6	6.3	4.2	26.5	11.5	8.5	8.6	20.9	22.0	14.7	8.8
MARYLAND	7.9	13.7	28.6	6.6	20.7	4.0	2.1	.7	8.6	2.9	2.6
NEW YORK	7.3	2.8	2.4	8.0	10.8	1.6	3.7	9.8	4.2	9.5	11.7
FLORIDA	5.8	2.5	3.4	6.6	1.2	.9	1.0	.1	10.6	3.1	1.1
MASS	5.8	.4	3.5	7.5	6.8	2.3	17.3	1.2	2.4	7.6	4.4
NEW JERSEY	4.9	.5	7.1	8.0	1.2	3.5	1.0	1.0	2.4	2.4	1.8
MISSOURI	3.9	1.3	1.5	4.5	2.2	1.5	.1	*	6.3	1.1	1.5
TEXAS	3.9	3.6	2.7	2.3	3.1	2.4	4.0	.3	9.8	2.8	1.6
WASHINGTON	3.7	1.9	6.5	3.5	2.0	2.6	35.4	5.0	.4	2.1	1.4
PENN	3.6	3.5	.1	3.0	5.2	10.5	.7	7.9	2.7	4.9	3.3
OHIO	3.4	1.5	.3	3.7	2.7	1.0	12.0	1.0	3.3	2.0	4.1
DIST OF COL	3.1	7.4	2.3	3.3	3.0	6.5	4.6	.2	2.5	3.2	11.1
NEW MEXICO	3.0	.6	.4	2.8	.2	1.4	.2	17.0	.5	.5	.4
VIRGINIA	2.8	.8	1.7	3.2	1.2	2.8	1.7	.2	4.0	.8	4.3
ALABAMA	2.4	1.1	*	1.0	.9	.8	.1	*	7.9	.1	1.9
COLORADO	1.7	1.7	13.4	.5	1.2	8.4	2.2	.2	3.8	6.4	2.2
ILLINOIS	1.6	3.9	.4	.8	3.2	2.0	1.3	6.6	.3	4.5	3.4
TENNESSEE	1.2	.9	.1	.7	1.3	1.1	.1	7.5	.2	1.5	2.2
MICHIGAN	1.2	1.4	.1	1.0	2.2	1.9	.8	.3	1.3	3.6	2.2
NEVADA	1.0	.3	.3	.3	*	2.4	-	9.5	.1	.1	.3
CONNECTICUT	1.0	.5	.4	1.1	1.5	.3	.3	.5	.8	1.9	.4
MINNESOTA	.7	1.9	*	.6	2.0	2.0	.2	.2	.2	.7	1.0
WISCONSIN	.6	3.1	.2	.2	1.6	.8	.1	.3	.7	1.6	3.2
LOUISIANA	.6	5.0	2.0	*	.8	.4	.2	*	1.6	.7	.8
ARIZONA	.6	1.9	.1	.6	.5	1.6	.4	*	.3	2.5	2.5
N CAROLINA	.5	2.0	.2	.1	2.5	1.2	.1	.1	.1	1.6	6.9
GEORGIA	.5	4.2	1.3	.3	1.6	.7	.4	.1	.2	.9	1.6
IDAHO	.5	1.3	.3	*	.1	.8	*	5.1	*	.3	.1
INDIANA	.5	1.0	*	.6	.9	.2	.1	.2	.2	2.1	.3
ALASKA	.4	.6	7.6	.1	.2	2.5	*	2.0	*	.6	1.4
UTAH	.4	1.0	*	.4	.6	2.3	*	.1	.1	1.2	.9
RHODE ISL	.3	.2	.4	.5	.4	.2	.1	*	*	1.0	1.1
MISSISSIPPI	.3	3.2	1.0	.1	.3	.2	.1	*	.7	.2	.6
OREGON	.3	1.8	2.3	*	1.2	2.5	*	.1	*	1.4	.8
HAWAII	.3	.5	.6	.3	.3	.4	*	.1	.1	1.1	.3
NEW HAMP	.2	.4	.2	.3	.5	.2	.4	*	*	.6	*
IOWA	.2	2.5	*	*	.6	.3	*	.5	.1	.9	.3
W VIRGINIA	.2	.9	.3	.1	.2	3.8	.1	*	*	2.4	.7
OKLAHOMA	.2	.9	*	.1	.3	1.6	.3	*	.1	.5	1.4
KANSAS	.2	.8	*	.1	.6	.4	*	*	.1	.6	.2
S CAROLINA	.2	1.3	*	*	.2	.2	.1	.7	*	.5	.8
KENTUCKY	.2	1.1	.1	.1	.3	.7	.1	*	*	.3	1.7
ARKANSAS	.1	.7	.4	.1	.5	.4	*	.2	*	.1	.5
MONTANA	.1	1.2	.7	*	.5	1.2	*	*	*	.3	.1
VERMONT	.1	.4	*	.1	.3	.2	-	*	*	.1	.2
MAINE	.1	.4	1.6	*	.2	.3	*	*	.1	.1	.9
DELAWARE	.1	.2	.2	*	.1	.5	-	*	.2	.5	.2
NEBRASKA	.1	1.3	.3	*	.3	.3	*	*	*	.2	.1
S DAKOTA	.1	.7	*	*	*	2.8	*	*	*	.2	*
N DAKOTA	.1	1.5	.2	*	.1	1.3	*	*	*	*	-
WYOMING	.1	.3	.2	*	*	2.5	*	*	*	.3	.1
OUT AREAS	.1	.9	.5	.1	.2	.7	-	.1	*	1.2	.3
OFF ABROAD	.3	.2	-	.1	.1	-	-	.3	.9	-	-

(1) OTHER - INCLUDES ENVIRONMENTAL PROTECTION AGENCY AND OFFICE OF ECONOMIC OPPORTUNITY

TABLE C-84B. PERCENT DISTRIBUTION OF FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT

TO EACH STATE, BY AGENCY, FISCAL YEAR 1971

STATE (IN ORDER OF TOTAL FEDERAL R&D OBLIGATIONS)	TOTAL	DEPT. OF AGRICULTURE	DEPT. OF COMMERCE	DEPT. OF DEFENSE	DEPT. OF HEALTH, EDUCATION & WELFARE	DEPT. OF INTERIOR	DEPT. OF TRANSPORTATION	ATOMIC ENERGY COMMISSION	NATIONAL AERONAUTICS & SPACE ADMIN	NATIONAL SCIENCE FOUNDATION	OTHER (1)
TOT, ALL ST	100.0	2.0	.9	49.2	9.5	1.3	3.2	8.5	21.4	2.2	1.9
CALIFORNIA	100.0	.6	.2	60.2	5.0	.5	1.3	8.2	21.7	1.5	.8
MARYLAND	100.0	3.4	3.4	41.5	24.8	.6	.8	.8	23.2	.8	.6
NEW YORK	100.0	.7	.3	53.6	14.0	.3	1.6	11.4	12.3	2.8	3.0
FLORIDA	100.0	.9	.5	55.4	1.9	.2	.5	.2	38.9	1.2	.4
MASS	100.0	.1	.6	63.6	11.0	.5	9.4	1.7	8.8	2.9	1.4
NEW JERSEY	100.0	.2	1.4	80.5	2.4	.9	.6	1.7	10.5	1.1	.7
MISSOURI	100.0	.6	.4	57.1	5.4	.5	.1	.1	34.6	.6	.7
TEXAS	100.0	1.8	.7	29.5	7.4	.8	3.2	.6	53.6	1.6	.8
WASHINGTON	100.0	1.0	1.6	46.1	5.0	.9	29.9	11.4	2.2	1.2	.7
PENN	100.0	1.9	*	40.7	13.5	3.7	.6	18.7	16.0	3.0	1.7
OHIO	100.0	.8	.1	53.0	7.5	.4	11.2	2.6	20.9	1.3	2.2
DIST OF COL	100.0	4.6	.7	52.0	9.0	2.6	4.6	.4	17.0	2.3	6.7
NEW MEXICO	100.0	.4	.1	45.9	.7	.6	.2	48.2	3.2	.4	.3
VIRGINIA	100.0	.6	.6	57.0	3.9	1.3	1.9	.5	30.8	.6	2.9
ALABAMA	100.0	.9	*	21.4	3.7	.4	.2	*	71.9	.1	1.5
COLORADO	100.0	1.9	7.2	15.6	6.7	6.1	4.0	.8	47.1	8.2	2.4
ILLINOIS	100.0	4.7	.2	23.9	18.2	1.6	2.6	34.2	4.5	6.1	4.0
TENNESSEE	100.0	1.4	.1	26.0	10.3	1.1	.3	51.5	3.4	2.6	3.3
MICHIGAN	100.0	2.2	*	41.5	16.7	2.0	2.0	2.4	23.2	6.5	3.4
NEVADA	100.0	.5	.3	15.9	.4	2.9	-	77.4	1.8	.3	.5
CONNECTICUT	100.0	1.0	.4	55.4	14.3	.4	.8	4.2	17.7	4.2	.7
MINNESOTA	100.0	5.6	*	45.2	28.1	3.8	1.0	2.3	7.6	2.4	2.9
WISCONSIN	100.0	10.2	.3	19.0	25.0	1.8	.4	4.8	22.9	5.8	9.9
LOUISIANA	100.0	16.7	3.1	1.2	12.7	.9	1.1	.4	58.8	2.6	2.7
ARIZONA	100.0	6.5	.1	49.9	8.0	3.6	2.4	.4	11.7	9.4	8.0
N CAROLINA	100.0	7.2	.3	9.7	43.5	2.8	.6	2.2	3.0	6.7	24.0
GEORGIA	100.0	15.9	2.3	26.8	30.1	1.6	2.2	1.2	10.2	4.0	5.7
IDAHO	100.0	5.1	.6	.2	1.2	2.1	*	89.0	.3	1.2	.3
INDIANA	100.0	4.1	*	55.6	17.3	.6	.9	4.3	6.8	9.3	1.0
ALASKA	100.0	2.9	18.5	10.0	4.0	8.5	*	44.5	1.1	3.3	7.1
UTAH	100.0	5.4	*	52.8	15.6	8.0	.2	2.4	3.9	7.0	4.6
RHODE ISL	100.0	1.0	1.1	69.7	11.1	.9	1.1	1.1	1.0	6.5	6.4
MISSISSIPPI	100.0	20.6	3.1	16.5	7.9	.8	.6	.1	45.4	1.2	3.6
OREGON	100.0	13.1	7.7	4.7	41.3	11.4	.5	2.5	1.7	11.4	5.7
HAWAII	100.0	3.6	2.1	55.2	12.5	2.2	.4	3.0	9.1	9.3	2.6
NEW HAMP	100.0	3.7	.8	58.6	19.5	1.0	5.0	.3	4.7	6.1	.3
IOWA	100.0	22.5	.1	7.6	27.9	1.7	.4	21.0	7.1	9.1	2.7
W VIRGINIA	100.0	8.7	1.3	22.6	10.9	23.1	1.2	.1	.8	24.6	6.6
OKLAHOMA	100.0	10.8	.1	19.7	17.5	11.5	6.3	.3	11.8	6.6	15.6
KANSAS	100.0	10.0	*	30.9	36.1	3.0	.5	2.1	7.3	8.0	2.0
S CAROLINA	100.0	17.2	.2	12.7	10.6	1.8	1.1	37.7	1.5	6.6	10.4
KENTUCKY	100.0	13.9	.7	26.2	19.5	6.0	1.3	2.5	5.1	4.1	20.7
ARKANSAS	100.0	9.4	3.1	32.7	31.3	3.5	.6	10.9	.4	1.5	6.7
MONTANA	100.0	21.3	5.5	10.6	40.6	13.3	.8	.3	.1	5.3	2.4
VERMONT	100.0	9.8	*	48.3	30.5	2.9	-	.3	.9	2.2	5.1
MAINE	100.0	9.3	17.1	6.1	21.7	4.3	1.3	.6	18.4	2.4	18.7
DELAWARE	100.0	5.2	2.3	8.0	5.7	7.7	-	.1	52.2	13.6	5.2
NEBRASKA	100.0	36.5	4.3	2.9	39.7	6.1	.9	.4	1.0	5.0	3.3
S DAKOTA	100.0	21.9	*	1.0	6.2	57.2	.9	.1	5.0	7.0	.7
N DAKOTA	100.0	51.1	2.6	3.1	12.3	27.7	1.3	.6	.2	1.3	-
WYOMING	100.0	12.8	4.2	1.0	5.2	60.4	1.0	.3	.9	12.0	2.2
OUT AREAS	100.0	14.3	4.1	24.7	16.1	7.0	-	5.8	2.7	21.3	4.0
OFF ABROAD	100.0	1.3	-	18.7	3.2	-	-	10.5	66.2	-	-

(1) OTHER - INCLUDES ENVIRONMENTAL PROTECTION AGENCY AND OFFICE OF ECONOMIC OPPORTUNITY

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
TOTAL, ALL STATES	15,239,833	4,045,757	7,553,880	480,150	1,618,997	728,317	471,999	209,907	130,826
DEPARTMENT OF AGRICULTURE	300,076	226,515	519	-	71,879	-	800	-	363
DEPARTMENT OF COMMERCE	142,786	92,352	26,765	-	15,989	35	1,637	-	6,008
DEPARTMENT OF DEFENSE	7,497,776	2,200,922	4,696,479	7,459	210,482	141,979	89,092	151,348	15
DEPT. OF HEALTH, EDUC, & WELFARE	1,441,271	297,463	54,749	-	761,745	7,155	216,484	27,295	76,380
DEPARTMENT OF THE INTERIOR	193,513	111,844	40,187	1,383	21,066	-	4,605	796	13,632
DEPARTMENT OF TRANSPORTATION	482,448	101,363	333,595	2	9,909	6,140	2,113	6,988	22,338
ATOMIC ENERGY COMMISSION	1,302,325	16,801	265,550	465,616	93,906	432,287	8,221	19,741	204
ENVIRONMENTAL PROTECTION AGENCY	134,181	56,576	47,557	-	17,034	-	1,828	230	8,956
NATIONAL AERONAUTICS & SPACE ADMIN	3,256,134	909,065	2,073,552	3,131	134,039	109,194	26,751	402	-
NATIONAL SCIENCE FOUNDATION	336,174	19,362	3,530	2,559	266,570	31,527	7,841	1,855	2,930
OFFICE OF ECONOMIC OPPORTUNITY	153,148	11,494	11,397	-	16,378	-	112,627	1,252	-
NEW ENGLAND	1,148,827	216,379	544,361	1,526	215,916	62,082	62,300	37,432	8,831
DEPARTMENT OF AGRICULTURE	7,221	2,744	98	-	4,043	-	29	-	307
DEPARTMENT OF COMMERCE	8,714	4,326	1,565	-	2,268	-	90	-	465
DEPARTMENT OF DEFENSE	711,521	143,738	432,060	-	42,720	59,363	694	32,946	-
DEPT. OF HEALTH, EDUC, & WELFARE	138,264	959	8,860	-	75,694	-	46,305	625	5,821
DEPARTMENT OF THE INTERIOR	6,837	1,700	2,219	-	1,831	-	445	-	642
DEPARTMENT OF TRANSPORTATION	86,965	57,219	22,494	-	1,899	-	200	3,754	1,399
ATOMIC ENERGY COMMISSION	22,234	182	4,104	1,526	13,256	2,350	816	-	-
ENVIRONMENTAL PROTECTION AGENCY	8,761	2,164	4,865	-	1,453	-	115	57	107
NATIONAL AERONAUTICS & SPACE ADMIN	108,990	3,147	65,483	-	36,263	369	3,728	-	-
NATIONAL SCIENCE FOUNDATION	37,712	200	1,261	-	35,248	-	863	50	90
OFFICE OF ECONOMIC OPPORTUNITY	11,608	-	1,352	-	1,241	-	9,015	-	-
CONNECTICUT	149,937	5,997	107,052	1,526	31,702	-	2,197	-	1,463
DEPARTMENT OF AGRICULTURE	1,513	718	52	-	436	-	-	-	307
DEPARTMENT OF COMMERCE	596	8	66	-	517	-	-	-	5
DEPARTMENT OF DEFENSE	84,587	4,958	77,673	-	1,906	-	50	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	21,388	23	68	-	18,843	-	1,722	-	732
DEPARTMENT OF THE INTERIOR	536	247	115	-	146	-	-	-	28
DEPARTMENT OF TRANSPORTATION	1,220	-	830	-	-	-	-	-	390
ATOMIC ENERGY COMMISSION	6,316	43	1,825	1,526	2,869	-	53	-	-
ENVIRONMENTAL PROTECTION AGENCY	586	-	528	-	39	-	19	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	26,550	-	25,573	-	977	-	-	-	-
NATIONAL SCIENCE FOUNDATION	6,223	-	-	-	5,969	-	253	-	1
OFFICE OF ECONOMIC OPPORTUNITY	422	-	322	-	-	-	100	-	-
MAINE	13,591	2,208	3,589	-	2,262	-	4,693	-	839
DEPARTMENT OF AGRICULTURE	1,267	464	-	-	803	-	-	-	-
DEPARTMENT OF COMMERCE	2,329	1,366	210	-	578	-	29	-	146
DEPARTMENT OF DEFENSE	829	133	590	-	106	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,946	-	5	-	296	-	2,433	-	212
DEPARTMENT OF THE INTERIOR	585	228	-	-	100	-	5	-	252
DEPARTMENT OF TRANSPORTATION	174	17	-	-	35	-	-	-	122
ATOMIC ENERGY COMMISSION	88	-	-	-	-	-	88	-	-
ENVIRONMENTAL PROTECTION AGENCY	143	-	13	-	23	-	-	-	107
NATIONAL AERONAUTICS & SPACE ADMIN	2,502	-	2,460	-	42	-	-	-	-
NATIONAL SCIENCE FOUNDATION	329	-	-	-	279	-	50	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,399	-	311	-	-	-	2,088	-	-
MASS	886,989	176,453	399,934	-	159,397	62,082	46,449	37,432	5,242

DEPARTMENT OF TRANSPORTATION	482,448	101,363	333,595	2	9,909	6,140	2,113	6,988	22,338
ATOMIC ENERGY COMMISSION	1,302,325	16,801	265,550	465,616	93,906	432,287	8,221	19,741	204
ENVIRONMENTAL PROTECTION AGENCY	134,181	56,576	47,557	-	17,034	-	1,828	230	8,956
NATIONAL AERONAUTICS & SPACE ADMIN	3,256,134	909,065	2,073,552	3,131	134,039	109,194	26,751	402	-
NATIONAL SCIENCE FOUNDATION	336,174	19,362	3,530	2,559	266,570	31,527	7,841	1,855	2,930
OFFICE OF ECONOMIC OPPORTUNITY	153,148	11,494	11,397	-	16,378	-	112,627	1,252	-
NEW ENGLAND	1,148,827	216,379	544,361	1,526	215,916	62,082	62,300	37,432	8,831
DEPARTMENT OF AGRICULTURE	7,221	2,744	98	-	4,043	-	29	-	307
DEPARTMENT OF COMMERCE	8,714	4,326	1,565	-	2,268	-	90	-	465
DEPARTMENT OF DEFENSE	711,521	143,738	432,060	-	42,720	59,363	694	32,946	-
DEPT. OF HEALTH, EDUC, & WELFARE	138,264	959	8,860	-	75,694	-	46,305	625	5,821
DEPARTMENT OF THE INTERIOR	6,837	1,700	2,219	-	1,831	-	445	-	642
DEPARTMENT OF TRANSPORTATION	86,965	57,219	22,494	-	1,899	-	200	3,754	1,399
ATOMIC ENERGY COMMISSION	22,234	182	4,104	1,526	13,256	2,350	816	-	-
ENVIRONMENTAL PROTECTION AGENCY	8,761	2,164	4,865	-	1,453	-	115	57	107
NATIONAL AERONAUTICS & SPACE ADMIN	108,990	3,147	65,483	-	36,263	369	3,728	-	-
NATIONAL SCIENCE FOUNDATION	37,712	200	1,261	-	35,248	-	863	50	90
OFFICE OF ECONOMIC OPPORTUNITY	11,608	-	1,352	-	1,241	-	9,015	-	-
CONNECTICUT	149,937	5,997	107,052	1,526	31,702	-	2,197	-	1,463
DEPARTMENT OF AGRICULTURE	1,513	718	52	-	436	-	-	-	307
DEPARTMENT OF COMMERCE	596	8	66	-	517	-	-	-	5
DEPARTMENT OF DEFENSE	84,587	4,958	77,673	-	1,906	-	50	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	21,388	23	68	-	18,843	-	1,722	-	732
DEPARTMENT OF THE INTERIOR	536	247	115	-	146	-	-	-	28
DEPARTMENT OF TRANSPORTATION	1,220	-	830	-	-	-	-	-	390
ATOMIC ENERGY COMMISSION	6,316	43	1,825	1,526	2,869	-	53	-	-
ENVIRONMENTAL PROTECTION AGENCY	586	-	528	-	39	-	19	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	26,550	-	25,573	-	977	-	-	-	-
NATIONAL SCIENCE FOUNDATION	6,223	-	-	-	5,969	-	253	-	1
OFFICE OF ECONOMIC OPPORTUNITY	422	-	322	-	-	-	100	-	-
MAINE	13,591	2,208	3,589	-	2,262	-	4,693	-	839
DEPARTMENT OF AGRICULTURE	1,267	464	-	-	803	-	-	-	-
DEPARTMENT OF COMMERCE	2,329	1,366	210	-	578	-	29	-	146
DEPARTMENT OF DEFENSE	829	133	590	-	106	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,946	-	5	-	296	-	2,433	-	212
DEPARTMENT OF THE INTERIOR	585	228	-	-	100	-	5	-	252
DEPARTMENT OF TRANSPORTATION	174	17	-	-	35	-	-	-	122
ATOMIC ENERGY COMMISSION	88	-	-	-	-	-	88	-	-
ENVIRONMENTAL PROTECTION AGENCY	143	-	13	-	23	-	-	-	107
NATIONAL AERONAUTICS & SPACE ADMIN	2,502	-	2,460	-	42	-	-	-	-
NATIONAL SCIENCE FOUNDATION	329	-	-	-	279	-	50	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,399	-	311	-	-	-	2,088	-	-
MASS	886,989	176,453	399,934	-	159,397	62,082	46,449	37,432	5,242
DEPARTMENT OF AGRICULTURE	1,312	248	46	-	989	-	29	-	-
DEPARTMENT OF COMMERCE	4,989	2,607	1,234	-	819	-	52	-	277
DEPARTMENT OF DEFENSE	564,300	110,415	322,793	-	38,139	59,363	644	32,946	-
DEPT. OF HEALTH, EDUC, & WELFARE	97,478	637	8,787	-	46,824	-	36,392	625	4,213
DEPARTMENT OF THE INTERIOR	4,532	1,034	1,894	-	1,002	-	440	-	162
DEPARTMENT OF TRANSPORTATION	83,300	57,130	20,028	-	1,844	-	-	3,754	544
ATOMIC ENERGY COMMISSION	15,132	139	2,183	-	9,785	2,350	675	-	-
ENVIRONMENTAL PROTECTION AGENCY	6,794	1,114	4,221	-	1,306	-	96	57	-
NATIONAL AERONAUTICS & SPACE ADMIN	77,705	3,029	36,768	-	33,811	369	3,728	-	-
NATIONAL SCIENCE FOUNDATION	25,494	100	1,261	-	23,637	-	400	50	46
OFFICE OF ECONOMIC OPPORTUNITY	5,953	-	719	-	1,241	-	3,993	-	-
NEW HAMP	34,042	3,538	19,096	-	7,695	-	3,310	-	303
DEPARTMENT OF AGRICULTURE	1,274	618	-	-	656	-	-	-	-
DEPARTMENT OF COMMERCE	258	-	-	-	258	-	-	-	-
DEPARTMENT OF DEFENSE	19,945	2,723	17,025	-	197	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	6,650	-	-	-	3,383	-	3,100	-	167
DEPARTMENT OF THE INTERIOR	334	65	60	-	135	-	-	-	74
DEPARTMENT OF TRANSPORTATION	1,693	38	1,636	-	-	-	-	-	19
ATOMIC ENERGY COMMISSION	89	-	48	-	41	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	64	-	-	-	64	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	1,609	94	327	-	1,188	-	-	-	-
NATIONAL SCIENCE FOUNDATION	2,076	100	-	-	1,773	-	160	-	43
OFFICE OF ECONOMIC OPPORTUNITY	50	-	-	-	-	-	50	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
RHODE ISL	50,535	27,367	8,003	-	10,684	-	3,777	-	704
DEPARTMENT OF AGRICULTURE	511	-	-	-	511	-	-	-	-
DEPARTMENT OF COMMERCE	540	345	55	-	96	-	7	-	37
DEPARTMENT OF DEFENSE	35,229	25,507	7,567	-	2,155	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	5,608	299	-	-	3,540	-	1,471	-	298
DEPARTMENT OF THE INTERIOR	456	108	-	-	303	-	-	-	45
DEPARTMENT OF TRANSPORTATION	578	34	-	-	20	-	200	-	324
ATOMIC ENERGY COMMISSION	572	-	48	-	524	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,153	1,050	103	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	499	24	230	-	245	-	-	-	-
NATIONAL SCIENCE FOUNDATION	3,290	-	-	-	3,290	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,099	-	-	-	-	-	2,099	-	-
VERMONT	13,733	716	6,687	-	4,176	-	1,874	-	280
DEPARTMENT OF AGRICULTURE	1,344	696	-	-	648	-	-	-	-
DEPARTMENT OF COMMERCE	2	-	-	-	-	-	2	-	-
DEPARTMENT OF DEFENSE	6,631	2	6,412	-	217	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,194	-	-	-	2,808	-	1,187	-	199
DEPARTMENT OF THE INTERIOR	394	18	150	-	145	-	-	-	81
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	37	-	-	-	37	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	21	-	-	-	21	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	125	-	125	-	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION	300	-	-	-	300	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	685	-	-	-	-	-	685	-	-
M ATLANTIC	2,413,512	316,053	1,463,484	128,570	287,044	73,743	112,063	6,377	26,178
DEPARTMENT OF AGRICULTURE	20,334	14,208	170	-	5,823	-	133	-	-
DEPARTMENT OF COMMERCE	13,717	2,268	9,861	-	1,146	-	221	-	221
DEPARTMENT OF DEFENSE	1,423,285	266,733	1,090,288	-	26,220	15,479	24,565	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	248,356	594	7,386	-	159,598	1,767	51,901	6,377	20,733
DEPARTMENT OF THE INTERIOR	30,283	17,212	9,126	-	2,303	-	892	-	750
DEPARTMENT OF TRANSPORTATION	26,233	3,072	19,649	-	980	100	166	-	2,266
ATOMIC ENERGY COMMISSION	242,732	3,063	33,049	128,570	21,086	56,197	763	-	4
ENVIRONMENTAL PROTECTION AGENCY	17,465	3,358	9,469	-	2,082	-	397	-	2,159
NATIONAL AERONAUTICS & SPACE ADMIN	304,231	4,655	284,139	-	13,177	-	2,260	-	-
NATIONAL SCIENCE FOUNDATION	56,110	890	32	-	53,321	200	1,622	-	45
OFFICE OF ECONOMIC OPPORTUNITY	30,766	-	315	-	1,308	-	29,143	-	-
NEW JERSEY	745,131	143,572	557,600	-	25,672	9,500	6,312	-	2,475
DEPARTMENT OF AGRICULTURE	1,394	444	-	-	917	-	33	-	-
DEPARTMENT OF COMMERCE	10,130	1,550	8,114	-	267	-	33	-	166
DEPARTMENT OF DEFENSE	599,640	136,939	460,405	-	2,045	-	251	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	17,848	-	2,515	-	8,710	-	4,707	-	1,916
DEPARTMENT OF THE INTERIOR	6,702	703	5,669	-	222	-	3	-	105
DEPARTMENT OF TRANSPORTATION	4,690	4	4,361	-	107	-	-	-	218
ATOMIC ENERGY COMMISSION	12,982	740	52	-	2,654	9,500	36	-	-
ENVIRONMENTAL PROTECTION AGENCY	4,122	1,697	2,087	-	268	-	-	-	70
NATIONAL AERONAUTICS & SPACE ADMIN	78,595	605	74,375	-	3,615	-	-	-	-
NATIONAL SCIENCE FOUNDATION	7,979	890	22	-	6,867	-	200	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,049	-	-	-	-	-	1,049	-	-
NEW YORK	1,119,482	73,869	646,096	62,054	179,337	54,922	84,232	2,851	15,121

DEPARTMENT OF THE INTERIOR	456	108	-	-	303	-	-	-	45
DEPARTMENT OF TRANSPORTATION	578	34	-	-	20	-	200	-	324
ATOMIC ENERGY COMMISSION	572	-	48	-	524	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,153	1,050	103	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	499	24	230	-	245	-	-	-	-
NATIONAL SCIENCE FOUNDATION	3,290	-	-	-	3,290	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,099	-	-	-	-	-	2,099	-	-
VERMONT	13,733	716	6,687	-	4,176	-	1,874	-	280
DEPARTMENT OF AGRICULTURE	1,344	696	-	-	648	-	-	-	-
DEPARTMENT OF COMMERCE	2	-	-	-	-	-	2	-	-
DEPARTMENT OF DEFENSE	6,631	2	6,412	-	217	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,194	-	-	-	2,808	-	1,187	-	199
DEPARTMENT OF THE INTERIOR	394	18	150	-	145	-	-	-	81
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	37	-	-	-	37	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	21	-	-	-	21	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	125	-	125	-	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION	300	-	-	-	300	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	685	-	-	-	-	-	685	-	-
M ATLANTIC	2,413,512	315,053	1,463,484	128,570	287,044	73,743	112,063	6,377	26,178
DEPARTMENT OF AGRICULTURE	20,334	14,208	170	-	5,823	-	133	-	-
DEPARTMENT OF COMMERCE	13,717	2,268	9,861	-	1,146	-	221	-	221
DEPARTMENT OF DEFENSE	1,423,285	266,733	1,090,288	-	26,220	15,479	24,565	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	248,356	594	7,386	-	159,598	1,767	51,901	6,377	20,733
DEPARTMENT OF THE INTERIOR	30,283	17,212	9,126	-	2,303	-	892	-	750
DEPARTMENT OF TRANSPORTATION	26,233	3,072	19,649	-	980	100	166	-	2,266
ATOMIC ENERGY COMMISSION	242,732	3,063	33,049	128,570	21,086	56,197	763	-	4
ENVIRONMENTAL PROTECTION AGENCY	17,465	3,358	9,469	-	2,082	-	397	-	2,159
NATIONAL AERONAUTICS & SPACE ADMIN	304,231	4,655	284,139	-	13,177	-	2,260	-	-
NATIONAL SCIENCE FOUNDATION	56,110	890	32	-	53,321	200	1,622	-	45
OFFICE OF ECONOMIC OPPORTUNITY	30,766	-	315	-	1,308	-	29,143	-	-
NEW JERSEY	745,131	143,572	557,600	-	25,672	9,500	6,312	-	2,475
DEPARTMENT OF AGRICULTURE	1,394	444	-	-	917	-	33	-	-
DEPARTMENT OF COMMERCE	10,130	1,550	8,114	-	267	-	33	-	166
DEPARTMENT OF DEFENSE	599,640	136,939	460,405	-	2,045	-	251	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	17,848	-	2,515	-	8,710	-	4,707	-	1,916
DEPARTMENT OF THE INTERIOR	6,702	703	5,669	-	222	-	3	-	105
DEPARTMENT OF TRANSPORTATION	4,690	4	4,361	-	107	-	-	-	218
ATOMIC ENERGY COMMISSION	12,982	740	52	-	2,654	9,500	36	-	-
ENVIRONMENTAL PROTECTION AGENCY	4,122	1,697	2,087	-	268	-	-	-	70
NATIONAL AERONAUTICS & SPACE ADMIN	78,595	605	74,375	-	3,615	-	-	-	-
NATIONAL SCIENCE FOUNDATION	7,979	890	22	-	6,867	-	200	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,049	-	-	-	-	-	1,049	-	-
NEW YORK	1,119,482	73,869	646,096	62,054	179,337	54,922	84,232	2,851	15,121
DEPARTMENT OF AGRICULTURE	8,340	5,916	88	-	2,236	-	100	-	-
DEPARTMENT OF COMMERCE	3,385	718	1,747	-	677	-	188	-	55
DEPARTMENT OF DEFENSE	599,997	56,257	497,214	-	15,322	7,867	23,337	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	156,233	553	3,111	-	106,166	258	29,491	2,851	13,803
DEPARTMENT OF THE INTERIOR	3,170	1,460	644	-	597	-	50	-	419
DEPARTMENT OF TRANSPORTATION	18,035	2,790	14,000	-	373	100	166	-	606
ATOMIC ENERGY COMMISSION	127,359	2,323	1,450	62,054	14,224	46,697	607	-	4
ENVIRONMENTAL PROTECTION AGENCY	5,122	123	2,566	-	893	-	306	-	1,234
NATIONAL AERONAUTICS & SPACE ADMIN	137,663	3,729	124,999	-	7,089	-	1,846	-	-
NATIONAL SCIENCE FOUNDATION	31,801	-	10	-	30,699	-	1,092	-	-
OFFICE OF ECONOMIC OPPORTUNITY	28,377	-	267	-	1,061	-	27,049	-	-
PENN	548,899	98,612	259,788	66,516	82,035	9,321	21,519	3,526	7,582
DEPARTMENT OF AGRICULTURE	10,600	7,848	82	-	2,670	-	-	-	-
DEPARTMENT OF COMMERCE	202	-	-	-	202	-	-	-	-
DEPARTMENT OF DEFENSE	223,648	73,537	132,669	-	8,853	7,612	977	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	74,275	41	1,760	-	44,722	1,509	17,703	3,526	5,014
DEPARTMENT OF THE INTERIOR	20,411	15,049	2,813	-	1,484	-	839	-	226
DEPARTMENT OF TRANSPORTATION	3,508	278	1,288	-	500	-	-	-	1,442
ATOMIC ENERGY COMMISSION	102,391	-	31,547	66,516	4,208	-	120	-	-
ENVIRONMENTAL PROTECTION AGENCY	8,221	1,538	4,816	-	921	-	91	-	855
NATIONAL AERONAUTICS & SPACE ADMIN	87,973	321	84,765	-	2,473	-	414	-	-
NATIONAL SCIENCE FOUNDATION	16,330	-	-	-	15,755	200	330	-	45
OFFICE OF ECONOMIC OPPORTUNITY	1,340	-	48	-	247	-	1,045	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
E N CENTRAL	1,121,677	293,501	401,667	5,629	264,806	77,614	62,527	1,139	14,794
DEPARTMENT OF AGRICULTURE	32,717	22,835	30	-	9,728	-	76	-	48
DEPARTMENT OF COMMERCE	1,234	-	116	-	946	-	22	-	150
DEPARTMENT OF DEFENSE	470,787	176,795	231,972	-	44,224	106	17,489	201	-
DEPT. OF HEALTH, EDUC, & WELFARE	151,400	1,674	6,824	-	110,985	1,503	22,176	-	8,238
DEPARTMENT OF THE INTERIOR	11,722	3,395	4,334	-	1,451	-	1,718	-	824
DEPARTMENT OF TRANSPORTATION	69,261	625	60,862	-	2,693	-	631	-	4,450
ATOMIC ENERGY COMMISSION	110,937	672	4,415	5,629	21,412	75,635	3,159	-	15
ENVIRONMENTAL PROTECTION AGENCY	15,944	7,672	4,803	-	2,224	-	176	-	1,069
NATIONAL AERONAUTICS & SPACE ADMIN	189,187	79,833	87,412	-	17,836	170	3,936	-	-
NATIONAL SCIENCE FOUNDATION	46,532	-	-	-	44,872	200	1,460	-	-
OFFICE OF ECONOMIC OPPORTUNITY	21,956	-	899	-	8,435	-	11,684	938	-
ILLINOIS	249,089	30,773	24,879	-	87,708	76,020	25,287	201	4,221
DEPARTMENT OF AGRICULTURE	11,696	9,731	30	-	1,935	-	-	-	-
DEPARTMENT OF COMMERCE	524	-	56	-	318	-	-	-	150
DEPARTMENT OF DEFENSE	59,431	17,848	12,058	-	22,792	106	6,426	201	-
DEPT. OF HEALTH, EDUC, & WELFARE	45,406	110	935	-	31,991	-	9,199	-	3,171
DEPARTMENT OF THE INTERIOR	3,898	473	1,556	-	309	-	1,419	-	141
DEPARTMENT OF TRANSPORTATION	6,508	-	5,378	-	257	-	152	-	721
ATOMIC ENERGY COMMISSION	85,312	252	690	-	8,727	75,544	84	-	15
ENVIRONMENTAL PROTECTION AGENCY	3,296	1,216	1,530	-	495	-	32	-	23
NATIONAL AERONAUTICS & SPACE ADMIN	11,229	1,143	2,356	-	5,861	170	1,699	-	-
NATIONAL SCIENCE FOUNDATION	15,223	-	-	-	15,023	200	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	6,566	-	290	-	-	-	6,276	-	-
INDIANA	74,581	7,251	35,806	-	28,325	91	914	-	2,194
DEPARTMENT OF AGRICULTURE	3,081	1,139	-	-	1,942	-	-	-	-
DEPARTMENT OF COMMERCE	3	-	3	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	41,479	5,877	33,305	-	2,251	-	46	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	12,930	-	427	-	10,227	-	443	-	1,833
DEPARTMENT OF THE INTERIOR	473	223	-	-	245	-	5	-	-
DEPARTMENT OF TRANSPORTATION	680	-	112	-	292	-	-	-	276
ATOMIC ENERGY COMMISSION	3,194	-	-	-	3,103	91	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	352	-	3	-	264	-	-	-	85
NATIONAL AERONAUTICS & SPACE ADMIN	5,038	12	1,955	-	3,071	-	-	-	-
NATIONAL SCIENCE FOUNDATION	6,930	-	-	-	6,930	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	421	-	1	-	-	-	420	-	-
MICHIGAN	187,265	20,302	101,306	-	58,087	-	4,436	-	3,134
DEPARTMENT OF AGRICULTURE	4,167	2,243	-	-	1,876	-	-	-	48
DEPARTMENT OF COMMERCE	74	-	2	-	72	-	-	-	-
DEPARTMENT OF DEFENSE	77,661	14,537	56,158	-	6,896	-	70	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	31,195	161	2,355	-	24,752	-	2,913	-	1,014
DEPARTMENT OF THE INTERIOR	3,699	1,163	1,823	-	235	-	4	-	474
DEPARTMENT OF TRANSPORTATION	3,783	67	802	-	1,334	-	-	-	1,580
ATOMIC ENERGY COMMISSION	4,465	-	-	-	4,393	-	72	-	-
ENVIRONMENTAL PROTECTION AGENCY	3,864	2,112	1,027	-	707	-	-	-	18
NATIONAL AERONAUTICS & SPACE ADMIN	43,531	19	38,815	-	4,676	-	21	-	-
NATIONAL SCIENCE FOUNDATION	12,265	-	-	-	12,215	-	50	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,561	-	324	-	931	-	1,306	-	-
OHIO	518,133	226,896	203,825	5,629	47,091	-	29,607	938	4,147
DEPARTMENT OF AGRICULTURE	4,373	2,321	-	-	2,045	-	7	-	-
DEPARTMENT OF COMMERCE	388	-	55	-	311	-	22	-	-
DEPARTMENT OF DEFENSE	274,585	138,486	116,155	-	8,997	-	10,947	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	38,740	1,403	2,424	-	25,486	-	7,943	-	1,484
DEPARTMENT OF THE INTERIOR	2,026	782	465	-	381	-	281	-	117
DEPARTMENT OF TRANSPORTATION	57,895	558	54,570	-	560	-	479	-	1,728
ATOMIC ENERGY COMMISSION	13,537	343	2,392	5,629	2,170	-	3,003	-	-

DEPARTMENT OF COMMERCE	1,234	-	115	-	946	-	22	-	150
DEPARTMENT OF DEFENSE	470,787	176,795	231,972	-	44,224	106	17,489	201	-
DEPT. OF HEALTH, EDUC, & WELFARE	151,400	1,674	6,824	-	110,985	1,503	22,176	-	8,238
DEPARTMENT OF THE INTERIOR	11,722	3,395	4,334	-	1,451	-	1,718	-	824
DEPARTMENT OF TRANSPORTATION	69,261	625	60,862	-	2,693	-	631	-	4,450
ATOMIC ENERGY COMMISSION	110,937	672	4,415	5,629	21,412	75,635	3,159	-	15
ENVIRONMENTAL PROTECTION AGENCY	15,944	7,672	4,803	-	2,224	-	176	-	1,069
NATIONAL AERONAUTICS & SPACE ADMIN	189,187	79,833	87,412	-	17,836	170	3,936	-	-
NATIONAL SCIENCE FOUNDATION	46,532	-	-	-	44,872	200	1,460	-	-
OFFICE OF ECONOMIC OPPORTUNITY	21,956	-	899	-	8,435	-	11,684	938	-
ILLINOIS	249,089	30,773	24,879	-	87,708	76,020	25,287	201	4,221
DEPARTMENT OF AGRICULTURE	11,696	9,731	30	-	1,935	-	-	-	-
DEPARTMENT OF COMMERCE	524	-	56	-	318	-	-	-	150
DEPARTMENT OF DEFENSE	59,431	17,848	12,058	-	22,792	106	6,426	201	-
DEPT. OF HEALTH, EDUC, & WELFARE	45,406	110	935	-	31,991	-	9,199	-	3,171
DEPARTMENT OF THE INTERIOR	3,898	473	1,556	-	309	-	1,419	-	141
DEPARTMENT OF TRANSPORTATION	6,508	-	5,378	-	257	-	152	-	721
ATOMIC ENERGY COMMISSION	85,312	252	690	-	8,727	75,544	84	-	15
ENVIRONMENTAL PROTECTION AGENCY	3,296	1,216	1,530	-	495	-	32	-	23
NATIONAL AERONAUTICS & SPACE ADMIN	11,229	1,143	2,356	-	5,861	170	1,699	-	-
NATIONAL SCIENCE FOUNDATION	15,223	-	-	-	15,023	200	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	6,566	-	290	-	-	-	6,276	-	-
INDIANA	74,581	7,251	35,806	-	28,325	91	914	-	2,194
DEPARTMENT OF AGRICULTURE	3,081	1,139	-	-	1,942	-	-	-	-
DEPARTMENT OF COMMERCE	3	-	3	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	41,479	5,877	33,305	-	2,251	-	46	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	12,930	-	427	-	10,227	-	443	-	1,833
DEPARTMENT OF THE INTERIOR	473	223	-	-	245	-	5	-	-
DEPARTMENT OF TRANSPORTATION	680	-	112	-	292	-	-	-	276
ATOMIC ENERGY COMMISSION	3,194	-	-	-	3,103	91	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	352	-	3	-	264	-	-	-	85
NATIONAL AERONAUTICS & SPACE ADMIN	5,038	12	1,955	-	3,071	-	-	-	-
NATIONAL SCIENCE FOUNDATION	6,930	-	-	-	6,930	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	421	-	1	-	-	-	420	-	-
MICHIGAN	187,265	20,302	101,306	-	58,087	-	4,436	-	3,134
DEPARTMENT OF AGRICULTURE	4,167	2,243	-	-	1,876	-	-	-	48
DEPARTMENT OF COMMERCE	74	-	2	-	72	-	-	-	-
DEPARTMENT OF DEFENSE	77,661	14,537	56,158	-	6,896	-	70	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	31,195	161	2,355	-	24,752	-	2,913	-	1,014
DEPARTMENT OF THE INTERIOR	3,699	1,163	1,823	-	235	-	4	-	474
DEPARTMENT OF TRANSPORTATION	3,783	67	802	-	1,334	-	-	-	1,580
ATOMIC ENERGY COMMISSION	4,465	-	-	-	4,393	-	72	-	-
ENVIRONMENTAL PROTECTION AGENCY	3,864	2,112	1,027	-	707	-	-	-	18
NATIONAL AERONAUTICS & SPACE ADMIN	43,531	19	38,815	-	4,676	-	21	-	-
NATIONAL SCIENCE FOUNDATION	12,265	-	-	-	12,215	-	50	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,561	-	324	-	931	-	1,306	-	-
OHIO	518,133	226,896	203,825	5,629	47,091	-	29,607	938	4,147
DEPARTMENT OF AGRICULTURE	4,373	2,321	-	-	2,045	-	7	-	-
DEPARTMENT OF COMMERCE	388	-	55	-	311	-	22	-	-
DEPARTMENT OF DEFENSE	274,585	138,486	116,155	-	8,997	-	10,947	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	38,740	1,403	2,424	-	25,486	-	7,943	-	1,484
DEPARTMENT OF THE INTERIOR	2,026	782	465	-	381	-	281	-	117
DEPARTMENT OF TRANSPORTATION	57,895	558	54,570	-	560	-	479	-	1,728
ATOMIC ENERGY COMMISSION	13,537	343	2,392	5,629	2,170	-	3,003	-	-
ENVIRONMENTAL PROTECTION AGENCY	7,111	4,344	1,562	-	243	-	144	-	818
NATIONAL AERONAUTICS & SPACE ADMIN	108,172	78,659	25,918	-	1,379	-	2,216	-	-
NATIONAL SCIENCE FOUNDATION	6,776	-	-	-	5,376	-	1,400	-	-
OFFICE OF ECONOMIC OPPORTUNITY	4,530	-	284	-	143	-	3,165	938	-
WISCONSIN	92,609	8,279	35,851	-	43,595	1,503	2,283	-	1,098
DEPARTMENT OF AGRICULTURE	9,400	7,401	-	-	1,930	-	69	-	-
DEPARTMENT OF COMMERCE	245	-	-	-	245	-	-	-	-
DEPARTMENT OF DEFENSE	17,631	47	14,296	-	3,288	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	23,129	-	683	-	18,529	1,503	1,678	-	736
DEPARTMENT OF THE INTERIOR	1,626	754	490	-	281	-	9	-	92
DEPARTMENT OF TRANSPORTATION	395	-	-	-	250	-	-	-	145
ATOMIC ENERGY COMMISSION	4,429	77	1,333	-	3,019	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,321	-	681	-	515	-	-	-	125
NATIONAL AERONAUTICS & SPACE ADMIN	21,217	-	18,368	-	2,849	-	-	-	-
NATIONAL SCIENCE FOUNDATION	5,338	-	-	-	5,328	-	10	-	-
OFFICE OF ECONOMIC OPPORTUNITY	7,878	-	-	-	7,361	-	517	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
W N CENTRAL	785,993	55,488	589,865	-	102,236	6,814	15,878	5,216	10,496
DEPARTMENT OF AGRICULTURE	29,912	19,862	15	-	9,944	-	91	-	-
DEPARTMENT OF COMMERCE	2,855	2,124	339	-	124	-	43	-	225
DEPARTMENT OF DEFENSE	398,890	20,075	372,107	-	5,857	-	851	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	85,048	1,880	191	-	58,853	-	12,074	5,216	6,834
DEPARTMENT OF THE INTERIOR	16,748	8,548	3,960	-	3,191	-	74	-	975
DEPARTMENT OF TRANSPORTATION	1,994	-	704	-	357	-	-	-	933
ATOMIC ENERGY COMMISSION	10,191	15	575	-	2,755	6,814	32	-	-
ENVIRONMENTAL PROTECTION AGENCY	6,484	1,857	1,639	-	1,459	-	-	-	1,529
NATIONAL AERONAUTICS & SPACE ADMIN	219,021	1,127	210,040	-	7,318	-	536	-	-
NATIONAL SCIENCE FOUNDATION	12,348	-	-	-	12,168	-	180	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,502	-	295	-	210	-	1,997	-	-
IOWA	32,893	5,827	1,586	-	17,855	6,814	498	-	313
DEPARTMENT OF AGRICULTURE	7,416	5,432	-	-	1,984	-	-	-	-
DEPARTMENT OF COMMERCE	27	-	-	-	27	-	-	-	-
DEPARTMENT OF DEFENSE	2,509	196	997	-	1,316	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	9,180	-	-	-	8,630	-	249	-	301
DEPARTMENT OF THE INTERIOR	544	199	-	-	339	-	3	-	3
DEPARTMENT OF TRANSPORTATION	131	-	-	-	122	-	-	-	9
ATOMIC ENERGY COMMISSION	6,892	-	-	-	78	6,814	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	633	-	339	-	294	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,323	-	250	-	2,073	-	-	-	-
NATIONAL SCIENCE FOUNDATION	2,992	-	-	-	2,992	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	246	-	-	-	-	-	246	-	-
KANSAS	24,335	2,750	8,534	-	12,158	-	319	-	574
DEPARTMENT OF AGRICULTURE	2,443	1,177	-	-	1,266	-	-	-	-
DEPARTMENT OF COMMERCE	5	-	5	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	7,528	51	7,099	-	365	-	13	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	8,774	1,234	37	-	6,900	-	260	-	343
DEPARTMENT OF THE INTERIOR	724	284	-	-	323	-	-	-	117
DEPARTMENT OF TRANSPORTATION	114	-	-	-	-	-	-	-	114
ATOMIC ENERGY COMMISSION	512	-	-	-	512	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	155	-	78	-	77	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	1,788	4	1,020	-	764	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,951	-	-	-	1,951	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	341	-	295	-	-	-	46	-	-
MINNESOTA	102,812	9,872	51,494	-	27,520	-	8,572	521	4,833
DEPARTMENT OF AGRICULTURE	5,741	3,922	-	-	1,739	-	80	-	-
DEPARTMENT OF COMMERCE	16	10	6	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	47,507	322	45,563	-	1,622	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	28,895	282	154	-	15,301	-	8,182	521	4,455
DEPARTMENT OF THE INTERIOR	3,888	3,253	-	-	437	-	57	-	141
DEPARTMENT OF TRANSPORTATION	1,054	-	616	-	201	-	-	-	237
ATOMIC ENERGY COMMISSION	2,357	-	575	-	1,782	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,661	1,632	193	-	836	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	7,837	451	4,387	-	2,882	-	117	-	-
NATIONAL SCIENCE FOUNDATION	2,510	-	-	-	2,510	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	346	-	-	-	210	-	136	-	-
MISSOURI	596,917	26,418	523,845	-	32,683	-	6,089	4,695	3,187
DEPARTMENT OF AGRICULTURE	3,789	1,974	-	-	1,804	-	11	-	-
DEPARTMENT OF COMMERCE	2,122	1,650	255	-	6	-	34	-	177
DEPARTMENT OF DEFENSE	340,661	19,377	318,245	-	2,201	-	838	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	32,367	364	-	-	23,230	-	3,195	4,695	883
DEPARTMENT OF THE INTERIOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OFFICE OF ECONOMIC OPPORTUNITY	2,502	-	295	-	210	-	1,997	-	-
IOWA	32,893	5,827	1,586	-	17,855	6,814	498	-	313
DEPARTMENT OF AGRICULTURE	7,416	5,432	-	-	1,984	-	-	-	-
DEPARTMENT OF COMMERCE	27	-	-	-	27	-	-	-	-
DEPARTMENT OF DEFENSE	2,509	196	997	-	1,316	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	9,180	-	-	-	8,630	-	249	-	301
DEPARTMENT OF THE INTERIOR	544	199	-	-	339	-	3	-	3
DEPARTMENT OF TRANSPORTATION	131	-	-	-	122	-	-	-	9
ATOMIC ENERGY COMMISSION	6,892	-	-	-	78	6,814	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	633	-	339	-	294	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,323	-	250	-	2,073	-	-	-	-
NATIONAL SCIENCE FOUNDATION	2,992	-	-	-	2,992	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	246	-	-	-	-	-	246	-	-
KANSAS	24,335	2,750	8,534	-	12,158	-	319	-	574
DEPARTMENT OF AGRICULTURE	2,443	1,177	-	-	1,266	-	-	-	-
DEPARTMENT OF COMMERCE	5	-	5	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	7,528	51	7,099	-	365	-	13	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	8,774	1,234	37	-	6,900	-	260	-	343
DEPARTMENT OF THE INTERIOR	724	284	-	-	323	-	-	-	117
DEPARTMENT OF TRANSPORTATION	114	-	-	-	-	-	-	-	114
ATOMIC ENERGY COMMISSION	512	-	-	-	512	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	155	-	78	-	77	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	1,788	4	1,020	-	764	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,951	-	-	-	1,951	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	341	-	295	-	-	-	46	-	-
MINNESOTA	102,812	9,872	51,494	-	27,520	-	8,572	521	4,833
DEPARTMENT OF AGRICULTURE	5,741	3,922	-	-	1,739	-	80	-	-
DEPARTMENT OF COMMERCE	16	10	6	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	47,507	322	45,563	-	1,622	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	28,895	282	154	-	15,301	-	8,182	521	4,455
DEPARTMENT OF THE INTERIOR	3,888	3,253	-	-	437	-	57	-	141
DEPARTMENT OF TRANSPORTATION	1,054	-	616	-	201	-	-	-	237
ATOMIC ENERGY COMMISSION	2,357	-	575	-	1,782	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,661	1,632	193	-	836	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	7,837	451	4,387	-	2,882	-	117	-	-
NATIONAL SCIENCE FOUNDATION	2,510	-	-	-	2,510	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	346	-	-	-	210	-	136	-	-
MISSOURI	596,917	26,418	523,845	-	32,683	-	6,089	4,695	3,187
DEPARTMENT OF AGRICULTURE	3,789	1,974	-	-	1,804	-	11	-	-
DEPARTMENT OF COMMERCE	2,122	1,650	255	-	6	-	34	-	177
DEPARTMENT OF DEFENSE	340,661	19,377	318,245	-	2,201	-	838	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	32,367	364	-	-	23,230	-	3,195	4,695	883
DEPARTMENT OF THE INTERIOR	2,983	2,327	1	-	421	-	3	-	231
DEPARTMENT OF TRANSPORTATION	401	-	-	-	34	-	-	-	367
ATOMIC ENERGY COMMISSION	330	-	-	-	298	-	32	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,817	73	1,029	-	186	-	-	-	1,529
NATIONAL AERONAUTICS & SPACE ADMIN	206,481	653	204,315	-	1,094	-	419	-	-
NATIONAL SCIENCE FOUNDATION	3,589	-	-	-	3,409	-	180	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,377	-	-	-	-	-	1,377	-	-
NEBRASKA	10,406	3,321	255	-	5,849	-	243	-	738
DEPARTMENT OF AGRICULTURE	3,798	2,539	-	-	1,259	-	-	-	-
DEPARTMENT OF COMMERCE	445	333	51	-	20	-	6	-	35
DEPARTMENT OF DEFENSE	305	109	136	-	60	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,131	-	-	-	3,602	-	67	-	462
DEPARTMENT OF THE INTERIOR	632	169	-	-	312	-	3	-	148
DEPARTMENT OF TRANSPORTATION	93	-	-	-	-	-	-	-	93
ATOMIC ENERGY COMMISSION	37	-	-	-	37	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	175	152	-	-	23	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	102	19	68	-	15	-	-	-	-
NATIONAL SCIENCE FOUNDATION	521	-	-	-	521	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	167	-	-	-	-	-	167	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION,

STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
N DAKOTA	9,063	5,301	716	-	2,608	-	66	-	372
DEPARTMENT OF AGRICULTURE	4,633	3,671	-	-	962	-	-	-	-
DEPARTMENT OF COMMERCE	238	129	22	-	71	-	3	-	13
DEPARTMENT OF DEFENSE	281	-	31	-	250	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	1,111	-	-	-	891	-	58	-	162
DEPARTMENT OF THE INTERIOR	2,506	1,486	576	-	269	-	5	-	170
DEPARTMENT OF TRANSPORTATION	114	-	87	-	-	-	-	-	27
ATOMIC ENERGY COMMISSION	52	15	-	-	37	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	-	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	14	-	-	-	14	-	-	-	-
NATIONAL SCIENCE FOUNDATION	114	-	-	-	114	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	-	-	-	-	-	-	-	-	-
S DAKOTA	9,567	1,999	3,435	-	3,563	-	91	-	479
DEPARTMENT OF AGRICULTURE	2,092	1,147	15	-	930	-	-	-	-
DEPARTMENT OF COMMERCE	2	2	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	99	20	36	-	43	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	590	-	-	-	299	-	63	-	228
DEPARTMENT OF THE INTERIOR	5,471	830	3,383	-	1,090	-	3	-	165
DEPARTMENT OF TRANSPORTATION	87	-	1	-	-	-	-	-	86
ATOMIC ENERGY COMMISSION	11	-	-	-	11	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	43	-	-	-	43	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	476	-	-	-	476	-	-	-	-
NATIONAL SCIENCE FOUNDATION	671	-	-	-	671	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	25	-	-	-	-	-	25	-	-
S ATLANTIC	3,224,586	1,787,382	1,053,480	8,665	188,333	66,101	62,335	38,153	20,127
DEPARTMENT OF AGRICULTURE	99,146	86,646	75	-	12,213	-	212	-	-
DEPARTMENT OF COMMERCE	54,262	43,038	5,952	-	2,579	-	655	-	2,038
DEPARTMENT OF DEFENSE	1,522,337	849,682	560,792	-	15,953	54,675	9,632	31,600	3
DEPT. OF HEALTH, EDUC, & WELFARE	441,072	282,563	25,546	-	101,030	332	20,340	2,424	8,837
DEPARTMENT OF THE INTERIOR	39,792	25,201	7,126	-	2,436	-	506	796	3,727
DEPARTMENT OF TRANSPORTATION	47,921	28,248	9,595	-	1,179	834	419	3,156	4,490
ATOMIC ENERGY COMMISSION	26,677	3,312	5,883	8,622	8,179	-	596	-	85
ENVIRONMENTAL PROTECTION AGENCY	45,165	30,600	11,058	-	2,397	-	240	-	870
NATIONAL AERONAUTICS & SPACE ADMIN	855,039	411,431	420,386	43	11,530	3,860	7,787	2	-
NATIONAL SCIENCE FOUNDATION	53,695	15,167	869	-	29,289	6,400	1,743	150	77
OFFICE OF ECONOMIC OPPORTUNITY	39,480	11,494	6,198	-	1,548	-	20,205	35	-
DELAWARE	12,951	509	8,394	-	2,409	-	1,123	-	516
DEPARTMENT OF AGRICULTURE	669	90	-	-	579	-	-	-	-
DEPARTMENT OF COMMERCE	300	-	-	-	300	-	-	-	-
DEPARTMENT OF DEFENSE	1,037	-	531	-	506	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	739	-	-	-	299	-	-	-	440
DEPARTMENT OF THE INTERIOR	992	105	586	-	255	-	-	-	46
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	19	-	-	-	19	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	629	-	582	-	17	-	-	-	30
NATIONAL AERONAUTICS & SPACE ADMIN	6,760	14	6,695	-	51	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,756	300	-	-	383	-	1,073	-	-
OFFICE OF ECONOMIC OPPORTUNITY	50	-	-	-	-	-	50	-	-
DIST OF COL	478,162	344,374	76,893	-	17,161	-	32,437	229	7,068
DEPARTMENT OF AGRICULTURE	22,088	22,052	15	-	7	-	14	-	-

DEPARTMENT OF THE INTERIOR	2,506	1,486	576	-	269	-	5	-	170
DEPARTMENT OF TRANSPORTATION	114	-	87	-	-	-	-	-	27
ATOMIC ENERGY COMMISSION	52	15	-	-	37	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	-	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	14	-	-	-	14	-	-	-	-
NATIONAL SCIENCE FOUNDATION	114	-	-	-	114	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	-	-	-	-	-	-	-	-	-
S DAKOTA	9,567	1,999	3,435	-	3,563	-	91	-	479
DEPARTMENT OF AGRICULTURE	2,092	1,147	15	-	930	-	-	-	-
DEPARTMENT OF COMMERCE	2	2	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	99	20	36	-	43	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	590	-	-	-	299	-	63	-	228
DEPARTMENT OF THE INTERIOR	5,471	830	3,383	-	1,090	-	3	-	165
DEPARTMENT OF TRANSPORTATION	87	-	1	-	-	-	-	-	86
ATOMIC ENERGY COMMISSION	11	-	-	-	11	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	43	-	-	-	43	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	476	-	-	-	476	-	-	-	-
NATIONAL SCIENCE FOUNDATION	671	-	-	-	671	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	25	-	-	-	-	-	25	-	-
S ATLANTIC	3,224,586	1,787,382	1,053,480	8,665	188,333	66,101	62,335	38,163	20,127
DEPARTMENT OF AGRICULTURE	99,146	86,646	75	-	12,213	-	212	-	-
DEPARTMENT OF COMMERCE	54,262	43,038	5,952	-	2,579	-	655	-	2,038
DEPARTMENT OF DEFENSE	1,522,337	849,682	560,792	-	15,953	54,675	9,632	31,600	3
DEPT. OF HEALTH, EDUC, & WELFARE	441,072	282,563	25,546	-	101,030	332	20,340	2,424	8,837
DEPARTMENT OF THE INTERIOR	39,792	25,201	7,126	-	2,436	-	506	796	3,727
DEPARTMENT OF TRANSPORTATION	47,921	28,248	9,595	-	1,179	834	419	3,156	4,490
ATOMIC ENERGY COMMISSION	26,677	3,312	5,883	8,622	8,179	-	596	-	85
ENVIRONMENTAL PROTECTION AGENCY	45,165	30,600	11,058	-	2,397	-	240	-	870
NATIONAL AERONAUTICS & SPACE ADMIN	855,039	411,431	420,386	43	11,530	3,860	7,787	2	-
NATIONAL SCIENCE FOUNDATION	53,695	15,167	869	-	29,289	6,400	1,743	150	77
OFFICE OF ECONOMIC OPPORTUNITY	39,480	11,494	6,198	-	1,548	-	20,205	35	-
DELAWARE	12,951	509	8,394	-	2,409	-	1,123	-	516
DEPARTMENT OF AGRICULTURE	669	90	-	-	579	-	-	-	-
DEPARTMENT OF COMMERCE	300	-	-	-	300	-	-	-	-
DEPARTMENT OF DEFENSE	1,037	-	531	-	506	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	739	-	-	-	299	-	-	-	440
DEPARTMENT OF THE INTERIOR	992	105	586	-	255	-	-	-	46
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	19	-	-	-	19	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	629	-	582	-	17	-	-	-	30
NATIONAL AERONAUTICS & SPACE ADMIN	6,760	14	6,695	-	51	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,756	300	-	-	383	-	1,073	-	-
OFFICE OF ECONOMIC OPPORTUNITY	50	-	-	-	-	-	50	-	-
DIST OF COL	478,162	344,374	76,893	-	17,161	-	32,437	229	7,068
DEPARTMENT OF AGRICULTURE	22,088	22,052	15	-	7	-	14	-	-
DEPARTMENT OF COMMERCE	3,220	2,787	79	-	130	-	218	-	6
DEPARTMENT OF DEFENSE	248,662	190,017	52,125	-	2,248	-	4,182	90	-
DEPT. OF HEALTH, EDUC, & WELFARE	43,205	20,389	822	-	10,043	-	9,526	-	2,425
DEPARTMENT OF THE INTERIOR	12,533	9,081	323	-	101	-	334	-	2,694
DEPARTMENT OF TRANSPORTATION	22,185	18,609	1,022	-	330	-	379	139	1,706
ATOMIC ENERGY COMMISSION	2,109	1,509	18	-	199	-	383	-	-
ENVIRONMENTAL PROTECTION AGENCY	5,632	1,951	3,172	-	184	-	148	-	177
NATIONAL AERONAUTICS & SPACE ADMIN	81,338	57,925	15,710	-	1,437	-	6,266	-	-
NATIONAL SCIENCE FOUNDATION	10,859	8,560	380	-	1,729	-	130	-	60
OFFICE OF ECONOMIC OPPORTUNITY	26,331	11,494	3,227	-	753	-	10,857	-	-
FLORIDA	890,381	357,914	496,985	-	32,019	-	1,602	-	1,861
DEPARTMENT OF AGRICULTURE	7,602	6,175	-	-	1,394	-	33	-	-
DEPARTMENT OF COMMERCE	4,884	2,823	433	-	1,270	-	59	-	299
DEPARTMENT OF DEFENSE	492,974	201,811	287,021	-	4,106	-	36	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	16,802	-	1,005	-	13,745	-	1,143	-	909
DEPARTMENT OF THE INTERIOR	1,738	1,357	37	-	184	-	4	-	156
DEPARTMENT OF TRANSPORTATION	4,789	2,710	1,765	-	226	-	-	-	88
ATOMIC ENERGY COMMISSION	1,755	-	68	-	1,687	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,597	1,356	329	-	503	-	-	-	409
NATIONAL AERONAUTICS & SPACE ADMIN	346,033	138,854	205,983	-	1,196	-	-	-	-
NATIONAL SCIENCE FOUNDATION	10,536	2,828	-	-	7,708	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	671	-	344	-	-	-	327	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
GEORGIA	78,751	26,858	26,434	-	19,990	-	3,170	360	1,939
DEPARTMENT OF AGRICULTURE	12,497	10,400	-	-	2,097	-	-	-	-
DEPARTMENT OF COMMERCE	1,822	994	179	-	306	-	20	-	323
DEPARTMENT OF DEFENSE	21,139	1,055	17,941	-	2,068	-	75	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	23,684	11,815	59	-	9,804	-	571	360	1,075
DEPARTMENT OF THE INTERIOR	1,261	541	-	-	504	-	-	-	216
DEPARTMENT OF TRANSPORTATION	1,758	-	1,370	-	115	-	-	-	273
ATOMIC ENERGY COMMISSION	939	-	-	-	897	-	42	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,064	1,617	175	-	220	-	-	-	52
NATIONAL AERONAUTICS & SPACE ADMIN	8,017	436	6,701	-	880	-	-	-	-
NATIONAL SCIENCE FOUNDATION	3,149	-	-	-	3,099	-	50	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,421	-	9	-	-	-	2,412	-	-
MARYLAND	1,201,248	747,208	327,870	-	47,029	58,330	10,235	6,250	4,326
DEPARTMENT OF AGRICULTURE	40,969	39,924	10	-	1,001	-	34	-	-
DEPARTMENT OF COMMERCE	40,871	35,616	3,215	-	332	-	323	-	1,385
DEPARTMENT OF DEFENSE	498,296	298,474	133,190	-	3,199	54,595	2,590	6,248	-
DEPT. OF HEALTH, EDUC, & WELFARE	297,935	244,672	17,981	-	28,120	332	4,671	-	2,159
DEPARTMENT OF THE INTERIOR	7,725	5,882	1,555	-	213	-	-	-	75
DEPARTMENT OF TRANSPORTATION	10,073	5,838	2,868	-	90	834	40	-	403
ATOMIC ENERGY COMMISSION	9,055	1,515	4,053	-	3,301	-	101	-	85
ENVIRONMENTAL PROTECTION AGENCY	2,725	1,282	1,088	-	61	-	92	-	202
NATIONAL AERONAUTICS & SPACE ADMIN	278,993	110,620	161,003	-	4,635	2,569	164	2	-
NATIONAL SCIENCE FOUNDATION	9,773	3,385	289	-	5,952	-	130	-	17
OFFICE OF ECONOMIC OPPORTUNITY	4,833	-	2,618	-	125	-	2,090	-	-
N CAROLINA	82,715	30,386	4,903	-	40,582	-	4,573	1,170	1,101
DEPARTMENT OF AGRICULTURE	5,964	3,093	-	-	2,740	-	131	-	-
DEPARTMENT OF COMMERCE	245	-	71	-	144	-	30	-	-
DEPARTMENT OF DEFENSE	8,040	4,098	1,628	-	2,190	-	124	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	36,010	5,074	340	-	26,346	-	2,299	1,135	816
DEPARTMENT OF THE INTERIOR	2,290	675	1,085	-	258	-	158	-	114
DEPARTMENT OF TRANSPORTATION	467	48	94	-	154	-	-	-	171
ATOMIC ENERGY COMMISSION	1,815	179	-	-	1,636	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	18,840	17,207	970	-	663	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,512	12	715	-	846	-	939	-	-
NATIONAL SCIENCE FOUNDATION	5,506	-	-	-	5,506	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,026	-	-	-	99	-	892	35	-
S CAROLINA	23,382	5,718	671	8,665	5,865	-	1,812	-	651
DEPARTMENT OF AGRICULTURE	4,026	2,507	-	-	1,519	-	-	-	-
DEPARTMENT OF COMMERCE	58	-	52	-	6	-	-	-	-
DEPARTMENT OF DEFENSE	2,959	2,546	141	-	272	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,486	-	-	-	1,742	-	326	-	418
DEPARTMENT OF THE INTERIOR	429	191	-	-	163	-	-	-	75
DEPARTMENT OF TRANSPORTATION	267	-	50	-	59	-	-	-	158
ATOMIC ENERGY COMMISSION	8,817	39	49	8,622	107	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	950	208	359	-	383	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	361	133	20	43	165	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,543	94	-	-	1,449	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,486	-	-	-	-	-	1,486	-	-
VIRGINIA	424,880	266,523	101,458	-	17,612	1,371	6,783	29,225	1,908

ATOMIC ENERGY COMMISSION	939	-	-	-	897	-	42	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,064	1,617	175	-	220	-	-	-	52
NATIONAL AERONAUTICS & SPACE ADMIN	8,017	436	6,701	-	880	-	-	-	-
NATIONAL SCIENCE FOUNDATION	3,149	-	-	-	3,099	-	50	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,421	-	9	-	-	-	2,412	-	-
MARYLAND	1,201,248	747,208	327,870	-	47,029	58,330	10,235	6,250	4,326
DEPARTMENT OF AGRICULTURE	40,969	39,924	10	-	1,001	-	34	-	-
DEPARTMENT OF COMMERCE	40,871	35,616	3,215	-	332	-	323	-	1,385
DEPARTMENT OF DEFENSE	498,296	298,474	133,190	-	3,199	54,595	2,590	6,248	-
DEPT. OF HEALTH, EDUC, & WELFARE	297,935	244,672	17,981	-	28,120	332	4,671	-	2,159
DEPARTMENT OF THE INTERIOR	7,725	5,882	1,555	-	213	-	-	-	75
DEPARTMENT OF TRANSPORTATION	10,073	5,838	2,868	-	90	834	40	-	403
ATOMIC ENERGY COMMISSION	9,055	1,515	4,053	-	3,301	-	101	-	85
ENVIRONMENTAL PROTECTION AGENCY	2,725	1,282	1,088	-	61	-	92	-	202
NATIONAL AERONAUTICS & SPACE ADMIN	278,993	110,620	161,003	-	4,635	2,569	164	2	-
NATIONAL SCIENCE FOUNDATION	9,773	3,385	289	-	5,952	-	130	-	17
OFFICE OF ECONOMIC OPPORTUNITY	4,833	-	2,618	-	125	-	2,090	-	-
N CAROLINA	82,715	30,386	4,903	-	40,582	-	4,573	1,170	1,101
DEPARTMENT OF AGRICULTURE	5,964	3,093	-	-	2,740	-	131	-	-
DEPARTMENT OF COMMERCE	245	-	71	-	144	-	30	-	-
DEPARTMENT OF DEFENSE	8,040	4,098	1,628	-	2,190	-	124	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	36,010	5,074	340	-	26,346	-	2,299	1,135	816
DEPARTMENT OF THE INTERIOR	2,290	675	1,085	-	258	-	158	-	114
DEPARTMENT OF TRANSPORTATION	467	48	94	-	154	-	-	-	171
ATOMIC ENERGY COMMISSION	1,815	179	-	-	1,636	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	18,840	17,207	970	-	663	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,512	12	715	-	846	-	939	-	-
NATIONAL SCIENCE FOUNDATION	5,506	-	-	-	5,506	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,026	-	-	-	99	-	892	35	-
S CAROLINA	23,382	5,718	671	8,665	5,865	-	1,812	-	651
DEPARTMENT OF AGRICULTURE	4,026	2,507	-	-	1,519	-	-	-	-
DEPARTMENT OF COMMERCE	58	-	52	-	6	-	-	-	-
DEPARTMENT OF DEFENSE	2,959	2,546	141	-	272	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,486	-	-	-	1,742	-	326	-	418
DEPARTMENT OF THE INTERIOR	429	191	-	-	163	-	-	-	75
DEPARTMENT OF TRANSPORTATION	267	-	50	-	59	-	-	-	158
ATOMIC ENERGY COMMISSION	8,817	39	49	8,622	107	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	950	208	359	-	383	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	361	133	20	43	165	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,543	94	-	-	1,449	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,486	-	-	-	-	-	1,486	-	-
VIRGINIA	424,880	266,523	101,458	-	17,612	1,371	6,783	29,225	1,908
DEPARTMENT OF AGRICULTURE	2,533	762	50	-	1,721	-	-	-	-
DEPARTMENT OF COMMERCE	2,429	577	1,852	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	241,983	150,806	61,845	-	1,362	80	2,625	25,262	3
DEPT. OF HEALTH, EDUC, & WELFARE	16,696	16	5,339	-	9,637	-	1,344	-	360
DEPARTMENT OF THE INTERIOR	5,401	3,707	512	-	233	-	-	796	153
DEPARTMENT OF TRANSPORTATION	7,993	1,043	2,426	-	115	-	-	3,017	1,392
ATOMIC ENERGY COMMISSION	2,148	50	1,695	-	333	-	70	-	-
ENVIRONMENTAL PROTECTION AGENCY	10,297	6,156	4,111	-	30	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	130,773	103,406	23,428	-	2,230	1,291	418	-	-
NATIONAL SCIENCE FOUNDATION	2,661	-	200	-	1,951	-	360	150	-
OFFICE OF ECONOMIC OPPORTUNITY	1,966	-	-	-	-	-	1,966	-	-
W VIRGINIA	32,116	7,892	9,872	-	5,666	6,400	600	929	757
DEPARTMENT OF AGRICULTURE	2,798	1,643	-	-	1,155	-	-	-	-
DEPARTMENT OF COMMERCE	433	241	71	-	91	-	5	-	25
DEPARTMENT OF DEFENSE	7,247	875	6,370	-	2	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	3,515	597	-	-	1,294	-	460	929	235
DEPARTMENT OF THE INTERIOR	7,423	3,662	3,028	-	525	-	10	-	198
DEPARTMENT OF TRANSPORTATION	389	-	-	-	90	-	-	-	299
ATOMIC ENERGY COMMISSION	20	20	-	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,431	823	272	-	336	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	252	31	131	-	90	-	-	-	-
NATIONAL SCIENCE FOUNDATION	7,912	-	-	-	1,512	6,400	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	696	-	-	-	571	-	125	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
E S CENTRAL	618,235	236,533	224,204	80,914	52,398	2,796	19,020	-	3,370
DEPARTMENT OF AGRICULTURE	18,750	10,119	17	-	8,594	-	20	-	-
DEPARTMENT OF COMMERCE	1,744	898	183	-	514	-	17	-	132
DEPARTMENT OF DEFENSE	139,733	71,834	63,424	1,241	2,439	-	795	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	40,671	83	97	-	31,812	179	7,039	-	1,461
DEPARTMENT OF THE INTERIOR	5,520	2,534	215	1,383	750	-	200	-	438
DEPARTMENT OF TRANSPORTATION	1,751	154	566	-	19	-	195	-	817
ATOMIC ENERGY COMMISSION	97,784	374	18,588	75,372	1,615	1,835	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	7,996	6,400	402	-	672	-	-	-	522
NATIONAL AERONAUTICS & SPACE ADMIN	287,612	144,137	140,447	359	2,497	-	172	-	-
NATIONAL SCIENCE FOUNDATION	6,615	-	-	2,559	3,164	782	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	10,059	-	265	-	322	-	9,472	-	-
ALABAMA	360,011	199,255	139,212	-	14,701	-	6,236	-	607
DEPARTMENT OF AGRICULTURE	3,221	1,343	-	-	1,878	-	-	-	-
DEPARTMENT OF COMMERCE	21	2	5	-	14	-	-	-	-
DEPARTMENT OF DEFENSE	76,884	58,423	16,666	-	1,000	-	795	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	13,165	83	97	-	9,535	-	3,100	-	350
DEPARTMENT OF THE INTERIOR	1,620	1,198	-	-	280	-	7	-	135
DEPARTMENT OF TRANSPORTATION	647	-	566	-	-	-	-	-	81
ATOMIC ENERGY COMMISSION	105	-	-	-	105	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	3,208	3,000	128	-	39	-	-	-	41
NATIONAL AERONAUTICS & SPACE ADMIN	258,736	135,206	121,750	-	1,641	-	139	-	-
NATIONAL SCIENCE FOUNDATION	209	-	-	-	209	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,195	-	-	-	-	-	2,195	-	-
KENTUCKY	23,030	7,653	572	-	9,145	-	5,030	-	630
DEPARTMENT OF AGRICULTURE	3,198	431	-	-	2,767	-	-	-	-
DEPARTMENT OF COMMERCE	158	-	26	-	104	-	-	-	28
DEPARTMENT OF DEFENSE	6,029	5,413	8	-	608	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,489	-	-	-	4,001	-	268	-	220
DEPARTMENT OF THE INTERIOR	1,377	910	20	-	175	-	193	-	79
DEPARTMENT OF TRANSPORTATION	303	-	-	-	-	-	-	-	303
ATOMIC ENERGY COMMISSION	585	-	518	-	67	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	63	-	-	-	63	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	1,177	899	-	-	278	-	-	-	-
NATIONAL SCIENCE FOUNDATION	952	-	-	-	842	-	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	4,699	-	-	-	240	-	4,459	-	-
MISSISSIPPI	46,696	19,892	17,863	-	6,498	-	1,292	-	1,151
DEPARTMENT OF AGRICULTURE	9,642	7,569	-	-	2,053	-	20	-	-
DEPARTMENT OF COMMERCE	1,451	876	147	-	314	-	17	-	97
DEPARTMENT OF DEFENSE	7,761	7,416	97	-	248	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	3,684	-	-	-	2,776	-	408	-	500
DEPARTMENT OF THE INTERIOR	370	139	-	-	100	-	-	-	131
DEPARTMENT OF TRANSPORTATION	294	107	-	-	19	-	-	-	168
ATOMIC ENERGY COMMISSION	48	32	-	-	16	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	536	-	135	-	146	-	-	-	255
NATIONAL AERONAUTICS & SPACE ADMIN	21,203	3,753	17,220	-	197	-	33	-	-
NATIONAL SCIENCE FOUNDATION	547	-	-	-	547	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,160	-	264	-	82	-	814	-	-
TENNESSEE	188,498	9,733	66,557	80,914	22,054	2,796	5,462	-	982
DEPARTMENT OF AGRICULTURE	2,689	776	17	-	1,896	-	-	-	-
DEPARTMENT OF COMMERCE	114	20	5	-	82	-	-	-	7
DEPARTMENT OF DEFENSE	49,059	582	46,653	1,241	583	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	19,333	-	-	-	15,500	179	3,263	-	391
DEPARTMENT OF THE INTERIOR	2,153	287	195	1,383	195	-	-	-	93

[illegible]	[illegible]	[illegible]	566	-	19	[illegible]	195	-	817
ATOMIC ENERGY COMMISSION	97,784	374	18,588	75,372	1,615	1,835	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	7,996	6,400	402	-	672	-	-	-	522
NATIONAL AERONAUTICS & SPACE ADMIN	287,612	144,137	140,447	359	2,497	-	172	-	-
NATIONAL SCIENCE FOUNDATION	6,615	-	-	2,559	3,164	782	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	10,059	-	265	-	322	-	9,472	-	-
ALABAMA	360,011	199,255	139,212	-	14,701	-	6,236	-	607
DEPARTMENT OF AGRICULTURE	3,221	1,343	-	-	1,878	-	-	-	-
DEPARTMENT OF COMMERCE	21	2	5	-	14	-	-	-	-
DEPARTMENT OF DEFENSE	76,884	58,423	16,666	-	1,000	-	795	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	13,165	83	97	-	9,535	-	3,100	-	350
DEPARTMENT OF THE INTERIOR	1,620	1,198	-	-	280	-	7	-	135
DEPARTMENT OF TRANSPORTATION	647	-	566	-	-	-	-	-	81
ATOMIC ENERGY COMMISSION	105	-	-	-	105	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	3,208	3,000	128	-	39	-	-	-	41
NATIONAL AERONAUTICS & SPACE ADMIN	258,736	135,206	121,750	-	1,641	-	139	-	-
NATIONAL SCIENCE FOUNDATION	209	-	-	-	209	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,195	-	-	-	-	-	2,195	-	-
KENTUCKY	23,030	7,653	572	-	9,145	-	5,030	-	630
DEPARTMENT OF AGRICULTURE	3,198	431	-	-	2,767	-	-	-	-
DEPARTMENT OF COMMERCE	158	-	26	-	104	-	-	-	28
DEPARTMENT OF DEFENSE	6,029	5,413	8	-	608	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,489	-	-	-	4,001	-	268	-	220
DEPARTMENT OF THE INTERIOR	1,377	910	20	-	175	-	193	-	79
DEPARTMENT OF TRANSPORTATION	303	-	-	-	-	-	-	-	303
ATOMIC ENERGY COMMISSION	585	-	518	-	67	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	63	-	-	-	63	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	1,177	899	-	-	278	-	-	-	-
NATIONAL SCIENCE FOUNDATION	952	-	-	-	842	-	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	4,699	-	-	-	240	-	4,459	-	-
MISSISSIPPI	46,696	19,892	17,863	-	6,498	-	1,292	-	1,151
DEPARTMENT OF AGRICULTURE	9,642	7,569	-	-	2,053	-	20	-	-
DEPARTMENT OF COMMERCE	1,451	876	147	-	314	-	17	-	97
DEPARTMENT OF DEFENSE	7,761	7,416	97	-	248	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	3,684	-	-	-	2,776	-	408	-	500
DEPARTMENT OF THE INTERIOR	370	139	-	-	100	-	-	-	131
DEPARTMENT OF TRANSPORTATION	294	107	-	-	19	-	-	-	168
ATOMIC ENERGY COMMISSION	48	32	-	-	16	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	536	-	135	-	146	-	-	-	255
NATIONAL AERONAUTICS & SPACE ADMIN	21,203	3,753	17,220	-	197	-	33	-	-
NATIONAL SCIENCE FOUNDATION	547	-	-	-	547	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,160	-	264	-	82	-	814	-	-
TENNESSEE	188,498	9,733	66,557	80,914	22,054	2,796	5,462	-	982
DEPARTMENT OF AGRICULTURE	2,689	776	17	-	1,896	-	-	-	-
DEPARTMENT OF COMMERCE	114	20	5	-	82	-	-	-	7
DEPARTMENT OF DEFENSE	49,059	582	46,653	1,241	583	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	19,333	-	-	-	15,500	179	3,263	-	391
DEPARTMENT OF THE INTERIOR	2,153	287	195	1,383	195	-	-	-	93
DEPARTMENT OF TRANSPORTATION	507	47	-	-	-	-	195	-	265
ATOMIC ENERGY COMMISSION	97,046	342	18,070	75,372	1,427	1,835	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	4,189	3,400	139	-	424	-	-	-	226
NATIONAL AERONAUTICS & SPACE ADMIN	6,496	4,279	1,477	359	381	-	-	-	-
NATIONAL SCIENCE FOUNDATION	4,907	-	-	2,559	1,566	782	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,005	-	1	-	-	-	2,004	-	-
W S CENTRAL	733,149	203,842	393,814	-	100,747	671	23,183	2,160	8,732
DEPARTMENT OF AGRICULTURE	30,531	23,030	21	-	7,479	-	1	-	-
DEPARTMENT OF COMMERCE	7,358	1,511	4,497	-	1,130	-	35	-	185
DEPARTMENT OF DEFENSE	189,117	45,345	127,463	-	11,987	-	4,322	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	66,749	693	342	-	50,473	671	9,263	2,160	3,147
DEPARTMENT OF THE INTERIOR	9,248	5,001	1,431	-	1,109	-	201	-	1,506
DEPARTMENT OF TRANSPORTATION	21,929	133	16,759	-	894	-	502	-	3,641
ATOMIC ENERGY COMMISSION	6,420	464	2,329	-	3,588	-	39	-	-
ENVIRONMENTAL PROTECTION AGENCY	4,287	1,565	1,704	-	575	-	190	-	253
NATIONAL AERONAUTICS & SPACE ADMIN	375,494	125,500	238,766	-	10,145	-	1,083	-	-
NATIONAL SCIENCE FOUNDATION	13,729	600	200	-	12,819	-	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	8,287	-	302	-	548	-	7,437	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION,

STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
ARKANSAS	20,822	1,676	8,529	-	5,992	-	4,270	-	355
DEPARTMENT OF AGRICULTURE	1,959	329	-	-	1,630	-	-	-	-
DEPARTMENT OF COMMERCE	641	349	84	-	163	-	7	-	38
DEPARTMENT OF DEFENSE	6,802	223	6,210	-	-	-	369	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	6,512	-	-	-	3,547	-	2,741	-	224
DEPARTMENT OF THE INTERIOR	724	572	-	-	129	-	-	-	23
DEPARTMENT OF TRANSPORTATION	130	-	60	-	-	-	-	-	70
ATOMIC ENERGY COMMISSION	2,275	-	2,175	-	100	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	247	203	-	-	44	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	77	-	-	-	77	-	-	-	-
NATIONAL SCIENCE FOUNDATION	302	-	-	-	302	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,153	-	-	-	-	-	1,153	-	-
LOUISIANA	90,111	17,677	51,261	-	15,652	-	3,354	-	2,167
DEPARTMENT OF AGRICULTURE	15,011	13,552	-	-	1,459	-	-	-	-
DEPARTMENT OF COMMERCE	2,797	1,162	553	-	932	-	25	-	125
DEPARTMENT OF DEFENSE	1,063	45	215	-	709	-	94	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	11,424	513	-	-	8,413	-	1,422	-	1,076
DEPARTMENT OF THE INTERIOR	811	416	-	-	135	-	63	-	197
DEPARTMENT OF TRANSPORTATION	948	47	-	-	150	-	-	-	751
ATOMIC ENERGY COMMISSION	326	-	-	-	326	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	467	-	42	-	285	-	122	-	18
NATIONAL AERONAUTICS & SPACE ADMIN	52,958	1,942	50,451	-	565	-	-	-	-
NATIONAL SCIENCE FOUNDATION	2,334	-	-	-	2,334	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,972	-	-	-	344	-	1,628	-	-
OKLAHOMA	26,332	7,766	4,825	-	9,399	-	3,668	-	674
DEPARTMENT OF AGRICULTURE	2,834	1,429	-	-	1,405	-	-	-	-
DEPARTMENT OF COMMERCE	25	-	2	-	-	-	3	-	20
DEPARTMENT OF DEFENSE	5,179	1,839	1,603	-	1,467	-	270	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,601	-	-	-	3,117	-	1,149	-	335
DEPARTMENT OF THE INTERIOR	3,023	2,015	609	-	266	-	3	-	130
DEPARTMENT OF TRANSPORTATION	1,661	-	1,252	-	220	-	-	-	189
ATOMIC ENERGY COMMISSION	77	-	-	-	77	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,855	1,362	437	-	56	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	3,108	1,121	922	-	1,065	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,726	-	-	-	1,726	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,243	-	-	-	-	-	2,243	-	-
TEXAS	595,884	176,723	329,199	-	69,704	671	11,891	2,160	5,536
DEPARTMENT OF AGRICULTURE	10,727	7,720	21	-	2,985	-	1	-	-
DEPARTMENT OF COMMERCE	3,895	-	3,858	-	35	-	-	-	2
DEPARTMENT OF DEFENSE	176,073	43,238	119,435	-	9,811	-	3,589	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	44,212	180	342	-	35,396	671	3,951	2,160	1,512
DEPARTMENT OF THE INTERIOR	4,690	1,998	822	-	579	-	135	-	1,156
DEPARTMENT OF TRANSPORTATION	19,190	86	15,447	-	524	-	502	-	2,631
ATOMIC ENERGY COMMISSION	3,742	464	154	-	3,085	-	39	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,718	-	1,225	-	190	-	68	-	235
NATIONAL AERONAUTICS & SPACE ADMIN	319,351	122,437	187,393	-	8,438	-	1,083	-	-
NATIONAL SCIENCE FOUNDATION	9,367	600	200	-	8,457	-	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,919	-	302	-	204	-	2,413	-	-
MOUNTAIN	1,127,394	334,820	344,042	180,160	86,843	142,806	29,573	2,423	6,727
DEPARTMENT OF AGRICULTURE	24,990	18,473	10	-	6,432	-	75	-	-
DEPARTMENT OF COMMERCE	22,039	20,066	346	-	1,244	35	65	-	283
DEPARTMENT OF DEFENSE	352,791	226,505	98,266	6,218	15,542	2,357	3,894	-	9

OFFICE OF ECONOMIC OPPORTUNITY	1,153	-	-	-	-	-	1,153	-	-
LOUISIANA	90,111	17,677	51,261	-	15,652	-	3,354	-	2,167
DEPARTMENT OF AGRICULTURE	15,011	13,552	-	-	1,459	-	-	-	-
DEPARTMENT OF COMMERCE	2,797	1,162	553	-	932	-	25	-	125
DEPARTMENT OF DEFENSE	1,063	45	215	-	709	-	94	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	11,424	513	-	-	8,413	-	1,422	-	1,076
DEPARTMENT OF THE INTERIOR	811	416	-	-	135	-	63	-	197
DEPARTMENT OF TRANSPORTATION	948	47	-	-	150	-	-	-	751
ATOMIC ENERGY COMMISSION	326	-	-	-	326	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	467	-	42	-	285	-	122	-	18
NATIONAL AERONAUTICS & SPACE ADMIN	52,958	1,942	50,451	-	565	-	-	-	-
NATIONAL SCIENCE FOUNDATION	2,334	-	-	-	2,334	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,972	-	-	-	344	-	1,628	-	-
OKLAHOMA	26,332	7,766	4,825	-	9,399	-	3,668	-	674
DEPARTMENT OF AGRICULTURE	2,834	1,429	-	-	1,405	-	-	-	-
DEPARTMENT OF COMMERCE	25	-	2	-	-	-	3	-	20
DEPARTMENT OF DEFENSE	5,179	1,839	1,603	-	1,467	-	270	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,601	-	-	-	3,117	-	1,149	-	335
DEPARTMENT OF THE INTERIOR	3,023	2,015	609	-	266	-	3	-	130
DEPARTMENT OF TRANSPORTATION	1,661	-	1,252	-	220	-	-	-	189
ATOMIC ENERGY COMMISSION	77	-	-	-	77	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,855	1,362	437	-	56	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	3,108	1,121	922	-	1,065	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,726	-	-	-	1,726	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,243	-	-	-	-	-	2,243	-	-
TEXAS	595,884	176,723	329,199	-	69,704	671	11,891	2,160	5,536
DEPARTMENT OF AGRICULTURE	10,727	7,720	21	-	2,985	-	1	-	-
DEPARTMENT OF COMMERCE	3,895	-	3,858	-	35	-	-	-	2
DEPARTMENT OF DEFENSE	176,073	43,238	119,435	-	9,811	-	3,589	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	44,212	180	342	-	35,396	671	3,951	2,160	1,512
DEPARTMENT OF THE INTERIOR	4,690	1,998	822	-	579	-	135	-	1,156
DEPARTMENT OF TRANSPORTATION	19,190	86	15,447	-	524	-	502	-	2,631
ATOMIC ENERGY COMMISSION	3,742	464	154	-	3,085	-	39	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,718	-	1,225	-	190	-	68	-	235
NATIONAL AERONAUTICS & SPACE ADMIN	319,351	122,437	187,393	-	8,438	-	1,083	-	-
NATIONAL SCIENCE FOUNDATION	9,367	600	200	-	8,457	-	110	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,919	-	302	-	204	-	2,413	-	-
MOUNTAIN	1,127,394	334,820	344,042	180,160	86,843	142,806	29,573	2,423	6,727
DEPARTMENT OF AGRICULTURE	24,990	18,473	10	-	6,432	-	75	-	-
DEPARTMENT OF COMMERCE	22,039	20,066	346	-	1,244	35	65	-	283
DEPARTMENT OF DEFENSE	352,791	226,505	98,266	6,218	15,542	2,357	3,894	-	9
DEPT. OF HEALTH, EDUC, & WELFARE	45,896	5,099	14	-	27,273	-	9,459	1,060	2,991
DEPARTMENT OF THE INTERIOR	39,986	29,249	2,455	-	5,567	-	483	-	2,232
DEPARTMENT OF TRANSPORTATION	13,967	11,267	1,885	2	189	-	-	-	624
ATOMIC ENERGY COMMISSION	415,088	7,519	111,717	171,211	2,968	118,090	2,197	1,363	23
ENVIRONMENTAL PROTECTION AGENCY	7,803	2,645	2,987	-	1,662	-	-	-	509
NATIONAL AERONAUTICS & SPACE ADMIN	154,994	13,997	125,816	2,729	7,334	2,266	2,852	-	-
NATIONAL SCIENCE FOUNDATION	38,728	-	38	-	17,644	20,058	932	-	56
OFFICE OF ECONOMIC OPPORTUNITY	11,112	-	508	-	988	-	9,616	-	-
ARIZONA	88,723	30,991	30,125	-	12,600	6,073	7,556	-	1,378
DEPARTMENT OF AGRICULTURE	5,780	4,920	-	-	860	-	-	-	-
DEPARTMENT OF COMMERCE	118	-	23	-	6	-	3	-	86
DEPARTMENT OF DEFENSE	44,234	19,949	21,000	-	3,276	-	-	-	9
DEPT. OF HEALTH, EDUC, & WELFARE	7,102	1,781	-	-	3,240	-	1,638	-	443
DEPARTMENT OF THE INTERIOR	3,186	2,205	275	-	308	-	20	-	378
DEPARTMENT OF TRANSPORTATION	2,147	39	1,885	-	-	-	-	-	223
ATOMIC ENERGY COMMISSION	385	-	-	-	385	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,081	7	654	-	181	-	-	-	239
NATIONAL AERONAUTICS & SPACE ADMIN	10,369	2,090	6,098	-	1,604	-	577	-	-
NATIONAL SCIENCE FOUNDATION	8,299	-	-	-	2,140	6,073	86	-	-
OFFICE OF ECONOMIC OPPORTUNITY	6,022	-	190	-	600	-	5,232	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION,

STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY IN-DUSTRIAL FIRMS	UNIVER-SITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTI-TUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTI-TUTIONS	OTHER
WYOMING	8,102	4,755	79	-	2,821	-	40	-	407
DEPARTMENT OF AGRICULTURE	1,038	411	-	-	627	-	-	-	-
DEPARTMENT OF COMMERCE	339	203	32	-	77	-	4	-	23
DEPARTMENT OF DEFENSE	77	-	-	-	77	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	422	-	-	-	258	-	6	-	158
DEPARTMENT OF THE INTERIOR	4,897	4,094	2	-	606	-	4	-	191
DEPARTMENT OF TRANSPORTATION	82	47	-	-	-	-	-	-	35
ATOMIC ENERGY COMMISSION	23	-	-	-	22	-	1	-	-
ENVIRONMENTAL PROTECTION AGENCY	154	-	45	-	109	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	75	-	-	-	75	-	-	-	-
NATIONAL SCIENCE FOUNDATION	970	-	-	-	970	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	25	-	-	-	-	-	25	-	-
PACIFIC	4,004,921	561,622	2,533,123	74,686	315,037	291,803	85,137	112,481	31,032
DEPARTMENT OF AGRICULTURE	33,241	27,055	83	-	5,968	-	127	-	8
DEPARTMENT OF COMMERCE	30,094	17,666	3,833	-	5,854	-	480	-	2,261
DEPARTMENT OF DEFENSE	2,276,678	393,280	1,714,452	-	45,493	9,999	26,850	86,601	3
DEPT. OF HEALTH, EDUC, & WELFARE	219,437	2,570	5,489	-	143,619	2,703	37,740	9,433	17,883
DEPARTMENT OF THE INTERIOR	32,074	17,857	9,321	-	2,328	-	86	-	2,482
DEPARTMENT OF TRANSPORTATION	212,427	645	201,081	-	1,699	5,206	-	78	3,718
ATOMIC ENERGY COMMISSION	364,674	1,147	84,778	74,686	18,139	171,366	619	13,862	77
ENVIRONMENTAL PROTECTION AGENCY	20,276	2,315	10,630	-	4,510	-	710	173	1,938
NATIONAL AERONAUTICS & SPACE ADMIN	732,656	96,582	501,063	-	27,685	102,529	4,397	400	-
NATIONAL SCIENCE FOUNDATION	66,737	2,505	1,130	-	57,964	-	821	1,655	2,662
OFFICE OF ECONOMIC OPPORTUNITY	16,627	-	1,263	-	1,778	-	13,307	279	-
ALASKA	58,200	16,852	26,987	-	9,025	-	3,409	-	1,927
DEPARTMENT OF AGRICULTURE	1,695	1,205	-	-	490	-	-	-	-
DEPARTMENT OF COMMERCE	10,792	6,867	1,061	-	1,927	-	145	-	792
DEPARTMENT OF DEFENSE	5,815	2,930	267	-	2,606	-	12	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,334	1,081	-	-	933	-	152	-	168
DEPARTMENT OF THE INTERIOR	4,918	3,753	-	-	211	-	-	-	954
DEPARTMENT OF TRANSPORTATION	22	9	-	-	-	-	-	-	13
ATOMIC ENERGY COMMISSION	25,882	488	25,222	-	172	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	704	465	82	-	157	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	636	54	-	-	582	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,947	-	-	-	1,947	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	3,455	-	355	-	-	-	3,100	-	-
CALIFORNIA	3,295,379	508,651	2,044,939	29,025	235,445	289,361	70,516	96,039	21,403
DEPARTMENT OF AGRICULTURE	19,035	16,650	55	-	2,243	-	87	-	-
DEPARTMENT OF COMMERCE	5,940	2,348	1,417	-	1,722	-	159	-	294
DEPARTMENT OF DEFENSE	1,984,619	384,751	1,442,177	-	37,397	8,042	25,648	86,601	3
DEPT. OF HEALTH, EDUC, & WELFARE	166,288	1,141	5,338	-	106,853	2,218	30,118	7,146	13,474
DEPARTMENT OF THE INTERIOR	16,423	5,422	8,928	-	1,311	-	86	-	676
DEPARTMENT OF TRANSPORTATION	41,310	636	30,690	-	1,473	5,206	-	78	3,227
ATOMIC ENERGY COMMISSION	271,749	405	56,448	29,025	14,206	171,366	299	-	-
ENVIRONMENTAL PROTECTION AGENCY	14,168	527	9,194	-	2,966	-	309	84	1,088
NATIONAL AERONAUTICS & SPACE ADMIN	715,128	94,784	488,708	-	24,717	102,529	4,194	196	-
NATIONAL SCIENCE FOUNDATION	49,516	1,987	1,130	-	41,422	-	681	1,655	2,641
OFFICE OF ECONOMIC OPPORTUNITY	11,203	-	854	-	1,135	-	8,935	279	-
HAWAII	38,332	6,473	18,399	-	11,491	-	1,382	-	587
DEPARTMENT OF AGRICULTURE	1,398	746	-	-	612	-	40	-	-
DEPARTMENT OF COMMERCE	787	185	28	-	551	-	4	-	19
DEPARTMENT OF DEFENSE	21,157	3,818	15,677	-	1,644	-	28	-	[illegible]
DEPARTMENT OF THE INTERIOR	4,897	4,094	2	-	606	-	4	-	191

ATOMIC ENERGY COMMISSION	23	-	-	-	22	-	1	-	-
ENVIRONMENTAL PROTECTION AGENCY	154	-	45	-	109	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	75	-	-	-	75	-	-	-	-
NATIONAL SCIENCE FOUNDATION	970	-	-	-	970	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	25	-	-	-	-	-	25	-	-
PACIFIC	4,004,921	561,622	2,533,123	74,686	315,037	291,803	85,137	112,481	31,032
DEPARTMENT OF AGRICULTURE	33,241	27,055	83	-	5,968	-	127	-	8
DEPARTMENT OF COMMERCE	30,094	17,666	3,833	-	5,854	-	480	-	2,261
DEPARTMENT OF DEFENSE	2,276,678	393,280	1,714,452	-	45,493	9,999	26,850	86,601	3
DEPT. OF HEALTH, EDUC, & WELFARE	219,437	2,570	5,489	-	143,619	2,703	37,740	9,433	17,883
DEPARTMENT OF THE INTERIOR	32,074	17,857	9,321	-	2,328	-	86	-	2,482
DEPARTMENT OF TRANSPORTATION	212,427	645	201,081	-	1,699	5,206	-	78	3,718
ATOMIC ENERGY COMMISSION	364,674	1,147	84,778	74,686	18,139	171,366	619	13,862	77
ENVIRONMENTAL PROTECTION AGENCY	20,276	2,315	10,630	-	4,510	-	710	173	1,938
NATIONAL AERONAUTICS & SPACE ADMIN	732,656	96,582	501,063	-	27,685	102,529	4,397	400	-
NATIONAL SCIENCE FOUNDATION	66,737	2,505	1,130	-	57,964	-	821	1,655	2,662
OFFICE OF ECONOMIC OPPORTUNITY	16,627	-	1,263	-	1,778	-	13,307	279	-
ALASKA	58,200	16,852	26,987	-	9,025	-	3,409	-	1,927
DEPARTMENT OF AGRICULTURE	1,695	1,205	-	-	490	-	-	-	-
DEPARTMENT OF COMMERCE	10,792	6,867	1,061	-	1,927	-	145	-	792
DEPARTMENT OF DEFENSE	5,815	2,930	267	-	2,606	-	12	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,334	1,081	-	-	933	-	152	-	168
DEPARTMENT OF THE INTERIOR	4,918	3,753	-	-	211	-	-	-	954
DEPARTMENT OF TRANSPORTATION	22	9	-	-	-	-	-	-	13
ATOMIC ENERGY COMMISSION	25,882	488	25,222	-	172	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	704	465	82	-	157	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	636	54	-	-	582	-	-	-	-
NATIONAL SCIENCE FOUNDATION	1,947	-	-	-	1,947	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	3,455	-	355	-	-	-	3,100	-	-
CALIFORNIA	3,295,379	508,651	2,044,939	29,025	235,445	289,361	70,516	96,039	21,403
DEPARTMENT OF AGRICULTURE	19,035	16,650	55	-	2,243	-	87	-	-
DEPARTMENT OF COMMERCE	5,940	2,348	1,417	-	1,722	-	159	-	294
DEPARTMENT OF DEFENSE	1,984,619	384,751	1,442,177	-	37,397	8,042	25,648	86,601	3
DEPT. OF HEALTH, EDUC, & WELFARE	166,288	1,141	5,338	-	106,853	2,218	30,118	7,146	13,474
DEPARTMENT OF THE INTERIOR	16,423	5,422	8,928	-	1,311	-	86	-	676
DEPARTMENT OF TRANSPORTATION	41,310	636	30,690	-	1,473	5,206	-	78	3,227
ATOMIC ENERGY COMMISSION	271,749	405	56,448	29,025	14,206	171,366	299	-	-
ENVIRONMENTAL PROTECTION AGENCY	14,168	527	9,194	-	2,966	-	309	84	1,088
NATIONAL AERONAUTICS & SPACE ADMIN	715,128	94,784	488,708	-	24,717	102,529	4,194	196	-
NATIONAL SCIENCE FOUNDATION	49,516	1,987	1,130	-	41,422	-	681	1,655	2,641
OFFICE OF ECONOMIC OPPORTUNITY	11,203	-	854	-	1,135	-	8,935	279	-
HAWAII	38,332	6,473	18,399	-	11,491	-	1,382	-	587
DEPARTMENT OF AGRICULTURE	1,398	746	-	-	612	-	40	-	-
DEPARTMENT OF COMMERCE	787	185	28	-	551	-	4	-	19
DEPARTMENT OF DEFENSE	21,167	3,818	15,677	-	1,644	-	28	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	4,779	188	-	-	3,141	-	1,170	-	280
DEPARTMENT OF THE INTERIOR	844	628	4	-	123	-	-	-	89
DEPARTMENT OF TRANSPORTATION	153	-	-	-	40	-	-	-	113
ATOMIC ENERGY COMMISSION	1,144	-	388	-	691	-	-	-	65
ENVIRONMENTAL PROTECTION AGENCY	644	24	310	-	310	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	3,498	456	1,992	-	1,050	-	-	-	-
NATIONAL SCIENCE FOUNDATION	3,578	428	-	-	2,989	-	140	-	21
OFFICE OF ECONOMIC OPPORTUNITY	340	-	-	-	340	-	-	-	-
OREGON	41,853	12,216	677	-	20,258	485	4,546	1,850	1,821
DEPARTMENT OF AGRICULTURE	5,492	4,251	5	-	1,236	-	-	-	-
DEPARTMENT OF COMMERCE	3,228	2,460	394	-	58	-	52	-	264
DEPARTMENT OF DEFENSE	1,959	12	165	-	1,782	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	17,302	-	-	-	9,665	485	4,288	1,850	1,014
DEPARTMENT OF THE INTERIOR	4,783	4,177	23	-	322	-	-	-	261
DEPARTMENT OF TRANSPORTATION	189	-	-	-	21	-	-	-	168
ATOMIC ENERGY COMMISSION	1,055	177	-	-	878	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	1,866	1,139	75	-	538	-	-	-	114
NATIONAL AERONAUTICS & SPACE ADMIN	701	-	15	-	686	-	-	-	-
NATIONAL SCIENCE FOUNDATION	4,769	-	-	-	4,769	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	509	-	-	-	303	-	206	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
COLORADO	264,187	58,472	148,045	-	31,960	16,186	7,667	-	1,857
DEPARTMENT OF AGRICULTURE	5,015	3,785	-	-	1,155	-	75	-	-
DEPARTMENT OF COMMERCE	19,120	18,240	-	-	845	35	-	-	-
DEPARTMENT OF DEFENSE	41,190	6,210	31,455	-	3,506	-	19	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	17,668	944	14	-	12,785	-	2,761	-	1,164
DEPARTMENT OF THE INTERIOR	16,224	13,583	1,018	-	1,261	-	5	-	357
DEPARTMENT OF TRANSPORTATION	10,519	10,332	-	-	105	-	-	-	82
ATOMIC ENERGY COMMISSION	1,997	180	833	-	924	-	60	-	-
ENVIRONMENTAL PROTECTION AGENCY	3,671	1,713	875	-	829	-	-	-	254
NATIONAL AERONAUTICS & SPACE ADMIN	124,471	3,485	113,850	-	2,771	2,166	2,199	-	-
NATIONAL SCIENCE FOUNDATION	21,585	-	-	-	7,570	13,985	30	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,727	-	-	-	209	-	2,518	-	-
IDAHO	75,287	4,868	297	50,535	2,363	14,581	802	1,363	478
DEPARTMENT OF AGRICULTURE	3,835	2,957	-	-	878	-	-	-	-
DEPARTMENT OF COMMERCE	421	270	42	-	75	-	5	-	29
DEPARTMENT OF DEFENSE	123	-	-	-	123	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	918	-	-	-	589	-	100	-	229
DEPARTMENT OF THE INTERIOR	1,575	944	100	-	341	-	-	-	190
DEPARTMENT OF TRANSPORTATION	24	17	-	-	-	-	-	-	7
ATOMIC ENERGY COMMISSION	66,993	485	-	50,505	10	14,581	26	1,363	23
ENVIRONMENTAL PROTECTION AGENCY	195	-	155	-	40	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	245	195	-	30	20	-	-	-	-
NATIONAL SCIENCE FOUNDATION	903	-	-	-	287	-	616	-	-
OFFICE OF ECONOMIC OPPORTUNITY	55	-	-	-	-	-	55	-	-
MONTANA	17,592	6,783	1,026	-	3,356	-	5,487	-	940
DEPARTMENT OF AGRICULTURE	3,741	2,836	-	-	905	-	-	-	-
DEPARTMENT OF COMMERCE	959	600	111	-	169	-	15	-	64
DEPARTMENT OF DEFENSE	1,856	53	895	-	142	-	766	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	7,140	2,298	-	-	594	-	4,050	-	198
DEPARTMENT OF THE INTERIOR	2,348	996	-	-	380	-	443	-	529
DEPARTMENT OF TRANSPORTATION	133	-	-	-	-	-	-	-	133
ATOMIC ENERGY COMMISSION	46	-	-	-	46	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	205	-	20	-	169	-	-	-	16
NATIONAL AERONAUTICS & SPACE ADMIN	23	-	-	-	23	-	-	-	-
NATIONAL SCIENCE FOUNDATION	928	-	-	-	928	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	213	-	-	-	-	-	213	-	-
NEVADA	159,040	37,430	107,273	4,283	2,894	6,287	569	-	304
DEPARTMENT OF AGRICULTURE	778	280	-	-	498	-	-	-	-
DEPARTMENT OF COMMERCE	416	304	47	-	26	-	6	-	33
DEPARTMENT OF DEFENSE	25,333	24,013	1,085	-	235	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	658	-	-	-	413	-	195	-	50
DEPARTMENT OF THE INTERIOR	4,583	3,406	-	-	956	-	-	-	221
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	123,151	6,595	105,501	4,283	220	6,287	265	-	-
ENVIRONMENTAL PROTECTION AGENCY	346	300	-	-	46	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,878	2,532	340	-	6	-	-	-	-
NATIONAL SCIENCE FOUNDATION	494	-	-	-	494	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	403	-	300	-	-	-	103	-	-
NEW MEXICO	458,674	168,626	47,502	125,342	9,432	99,679	6,355	1,060	678
DEPARTMENT OF AGRICULTURE	1,771	1,016	-	-	755	-	-	-	-
DEPARTMENT OF COMMERCE	640	449	91	-	20	-	32	-	48
DEPARTMENT OF DEFENSE	210,524	159,188	37,379	6,218	2,315	2,357	3,067	-	-

NATIONAL SCIENCE FOUNDATION	21,585	-	-	-	7,570	13,985	30	-	-
OFFICE OF ECONOMIC OPPORTUNITY	2,727	-	-	-	209	-	2,518	-	-
IDAHO	75,287	4,868	297	50,535	2,363	14,581	802	1,363	478
DEPARTMENT OF AGRICULTURE	3,835	2,957	-	-	878	-	-	-	-
DEPARTMENT OF COMMERCE	421	270	42	-	75	-	5	-	29
DEPARTMENT OF DEFENSE	123	-	-	-	123	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	918	-	-	-	589	-	100	-	229
DEPARTMENT OF THE INTERIOR	1,575	944	100	-	341	-	-	-	190
DEPARTMENT OF TRANSPORTATION	24	17	-	-	-	-	-	-	7
ATOMIC ENERGY COMMISSION	66,993	485	-	50,505	10	14,581	26	1,363	23
ENVIRONMENTAL PROTECTION AGENCY	195	-	155	-	40	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	245	195	-	30	20	-	-	-	-
NATIONAL SCIENCE FOUNDATION	903	-	-	-	287	-	616	-	-
OFFICE OF ECONOMIC OPPORTUNITY	55	-	-	-	-	-	55	-	-
MONTANA	17,592	6,783	1,026	-	3,356	-	5,487	-	940
DEPARTMENT OF AGRICULTURE	3,741	2,836	-	-	905	-	-	-	-
DEPARTMENT OF COMMERCE	959	600	111	-	169	-	15	-	64
DEPARTMENT OF DEFENSE	1,856	53	895	-	142	-	766	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	7,140	2,298	-	-	594	-	4,050	-	198
DEPARTMENT OF THE INTERIOR	2,348	996	-	-	380	-	443	-	529
DEPARTMENT OF TRANSPORTATION	133	-	-	-	-	-	-	-	133
ATOMIC ENERGY COMMISSION	46	-	-	-	46	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	205	-	20	-	169	-	-	-	16
NATIONAL AERONAUTICS & SPACE ADMIN	23	-	-	-	23	-	-	-	-
NATIONAL SCIENCE FOUNDATION	928	-	-	-	928	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	213	-	-	-	-	-	213	-	-
NEVADA	159,040	37,430	107,273	4,283	2,894	6,287	569	-	304
DEPARTMENT OF AGRICULTURE	778	280	-	-	498	-	-	-	-
DEPARTMENT OF COMMERCE	416	304	47	-	26	-	6	-	33
DEPARTMENT OF DEFENSE	25,333	24,013	1,085	-	235	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	658	-	-	-	413	-	195	-	50
DEPARTMENT OF THE INTERIOR	4,583	3,406	-	-	956	-	-	-	221
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	123,151	6,595	105,501	4,283	220	6,287	265	-	-
ENVIRONMENTAL PROTECTION AGENCY	346	300	-	-	46	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,878	2,532	340	-	6	-	-	-	-
NATIONAL SCIENCE FOUNDATION	494	-	-	-	494	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	403	-	300	-	-	-	103	-	-
NEW MEXICO	458,674	168,626	47,502	125,342	9,432	99,679	6,355	1,060	678
DEPARTMENT OF AGRICULTURE	1,771	1,016	-	-	755	-	-	-	-
DEPARTMENT OF COMMERCE	640	449	91	-	20	-	32	-	48
DEPARTMENT OF DEFENSE	210,524	159,188	37,379	6,218	2,315	2,357	3,067	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	3,300	-	-	-	1,737	-	156	1,060	347
DEPARTMENT OF THE INTERIOR	2,736	1,187	792	-	528	-	8	-	221
DEPARTMENT OF TRANSPORTATION	924	832	-	2	84	-	-	-	6
ATOMIC ENERGY COMMISSION	221,139	259	5,383	116,423	7	97,222	1,845	-	-
ENVIRONMENTAL PROTECTION AGENCY	44	-	-	-	44	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	14,739	5,695	3,801	2,699	2,393	100	51	-	-
NATIONAL SCIENCE FOUNDATION	1,664	-	38	-	1,370	-	200	-	56
OFFICE OF ECONOMIC OPPORTUNITY	1,193	-	18	-	179	-	996	-	-
UTAH	55,789	22,895	9,695	-	21,417	-	1,097	-	685
DEPARTMENT OF AGRICULTURE	3,032	2,268	10	-	754	-	-	-	-
DEPARTMENT OF COMMERCE	26	-	-	-	26	-	-	-	-
DEPARTMENT OF DEFENSE	29,454	17,092	6,452	-	5,868	-	42	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	8,688	76	-	-	7,657	-	553	-	402
DEPARTMENT OF THE INTERIOR	4,437	2,834	268	-	1,187	-	3	-	145
DEPARTMENT OF TRANSPORTATION	138	-	-	-	-	-	-	-	138
ATOMIC ENERGY COMMISSION	1,354	-	-	-	1,354	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	2,107	625	1,238	-	244	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	2,194	-	1,727	-	442	-	25	-	-
NATIONAL SCIENCE FOUNDATION	3,885	-	-	-	3,885	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	474	-	-	-	-	-	474	-	-

TABLE C-85. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION, STATE, AGENCY, AND PERFORMER, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION, STATE, AND AGENCY	TOTAL	FEDERAL INTRAMURAL (1)	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVERSITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NON-PROFIT INSTITUTIONS	FFRDCS ADMIN BY NON-PROFIT INSTITUTIONS	OTHER
WASHINGTON	571,157	17,430	442,121	45,661	38,818	1,957	5,284	14,592	5,294
DEPARTMENT OF AGRICULTURE	5,621	4,203	23	-	1,387	-	-	-	8
DEPARTMENT OF COMMERCE	9,347	5,806	933	-	1,596	-	120	-	892
DEPARTMENT OF DEFENSE	263,118	1,769	256,166	-	2,064	1,957	1,162	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	28,734	160	151	-	23,027	-	2,012	437	2,947
DEPARTMENT OF THE INTERIOR	5,106	3,877	366	-	361	-	-	-	502
DEPARTMENT OF TRANSPORTATION	170,753	-	170,391	-	165	-	-	-	197
ATOMIC ENERGY COMMISSION	64,844	77	2,720	45,661	2,192	-	320	13,862	12
ENVIRONMENTAL PROTECTION AGENCY	2,894	160	969	-	539	-	401	89	736
NATIONAL AERONAUTICS & SPACE ADMIN	12,693	1,288	10,348	-	650	-	203	204	-
NATIONAL SCIENCE FOUNDATION	6,927	90	-	-	6,837	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	1,120	-	54	-	-	-	1,066	-	-
OUT AREAS	18,612	6,362	1,479	-	5,510	3,887	835	-	539
DEPARTMENT OF AGRICULTURE	2,656	968	-	-	1,652	-	36	-	-
DEPARTMENT OF COMMERCE	769	455	73	-	184	-	9	-	48
DEPARTMENT OF DEFENSE	4,592	3,278	1,294	-	20	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	2,993	208	-	-	2,311	-	39	-	435
DEPARTMENT OF THE INTERIOR	1,303	1,147	-	-	100	-	-	-	56
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	1,073	53	112	-	908	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY	-	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	507	253	-	-	254	-	-	-	-
NATIONAL SCIENCE FOUNDATION	3,968	-	-	-	81	3,887	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	751	-	-	-	-	-	751	-	-
OFF ABROAD	42,927	33,775	4,361	-	127	-	148	4,516	-
DEPARTMENT OF AGRICULTURE	578	575	-	-	3	-	-	-	-
DEPARTMENT OF COMMERCE	-	-	-	-	-	-	-	-	-
DEPARTMENT OF DEFENSE	8,045	3,657	4,361	-	27	-	-	-	-
DEPT. OF HEALTH, EDUC, & WELFARE	1,385	1,140	-	-	97	-	148	-	-
DEPARTMENT OF THE INTERIOR	-	-	-	-	-	-	-	-	-
DEPARTMENT OF TRANSPORTATION	-	-	-	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION	4,516	-	-	-	-	-	-	4,516	-
ENVIRONMENTAL PROTECTION AGENCY	-	-	-	-	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	28,403	28,403	-	-	-	-	-	-	-
NATIONAL SCIENCE FOUNDATION	-	-	-	-	-	-	-	-	-
OFFICE OF ECONOMIC OPPORTUNITY	-	-	-	-	-	-	-	-	-

(1) FEDERAL INTRAMURAL ACTIVITIES COVER COSTS ASSOCIATED WITH THE ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL PROGRAMS BY FEDERAL PERSONNEL AS WELL AS ACTUAL INTRAMURAL PERFORMANCE. (SEE TECHNICAL NOTES FOR FURTHER DESCRIPTION)

NOTE- THE OBLIGATIONS OF THE ELEVEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 98 PERCENT OF TOTAL FEDERAL R&D OBLIGATIONS IN FY 1971.

TABLE C-86. FEDERAL OBLIGATIONS FOR R&D PLANT, BY GEOGRAPHIC DIVISION, STATE, AND PERFORMER SUPPORTED

FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION AND STATE	TOTAL	FEDERAL INTRAMURAL	EXTRAMURAL						
			INDUSTRIAL FIRMS	FFRDCS ADMIN BY INDUSTRIAL FIRMS	UNIVER SITIES & COLLEGES	FFRDCS ADMIN BY UNIVS & COLLEGES	OTHER NONPROFIT INSTI- TUTIONS	FFRDCS ADMIN BY NONPROFIT INSTI- TUTIONS	OTHER
TOTAL, ALL STATES	586,019	186,480	54,007	110,624	49,239	178,669	2,507	3,267	1,226
NEW ENGLAND	15,674	5,109	1,791	145	7,211	718	300	-	400
CONNECTICUT	1,516	797	15	145	459	-	-	-	100
MAINE	-	-	-	-	-	-	-	-	-
MASS	9,700	2,596	1,419	-	4,567	718	200	-	200
NEW HAMP	1,972	40	-	-	1,732	-	100	-	100
RHODE ISL	2,069	1,676	40	-	353	-	-	-	-
VERMONT	417	-	317	-	100	-	-	-	-
M ATLANTIC	55,666	11,491	2,895	19,799	5,915	13,962	1,204	-	400
NEW JERSEY	5,047	3,808	499	-	350	390	-	-	-
NEW YORK	33,856	6,492	10	9,280	3,203	13,572	1,149	-	150
PENN	16,763	1,191	2,386	10,519	2,362	-	55	-	250
E N CENTRAL	100,124	11,092	1,637	1,142	8,868	77,193	192	-	-
ILLINOIS	85,223	858	17	-	7,055	77,193	100	-	-
INDIANA	790	244	-	-	546	-	-	-	-
MICHIGAN	903	386	40	-	477	-	-	-	-
OHIO	10,074	8,370	180	1,142	290	-	92	-	-
WISCONSIN	3,134	1,234	1,400	-	500	-	-	-	-
W N CENTRAL	10,802	1,696	1,638	-	6,639	829	-	-	-
IOWA	1,501	-	-	-	672	829	-	-	-
KANSAS	212	53	-	-	159	-	-	-	-
MINNESOTA	4,065	907	138	-	3,020	-	-	-	-
MISSOURI	2,214	414	-	-	1,800	-	-	-	-
NEBRASKA	1,185	281	-	-	904	-	-	-	-
N DAKOTA	125	41	-	-	84	-	-	-	-
S DAKOTA	1,500	-	1,500	-	-	-	-	-	-
S ATLANTIC	77,025	70,382	1,521	1,184	3,657	80	100	-	101
DELAWARE	-	-	-	-	-	-	-	-	-
DIST OF COL	5,126	4,291	700	-	35	-	100	-	-
FLORIDA	30,810	29,996	1	-	813	-	-	-	-
GEORGIA	2,263	823	-	-	1,440	-	-	-	-
MARYLAND	29,653	28,584	729	-	339	-	-	-	1
N CAROLINA	406	4	-	-	402	-	-	-	-
S CAROLINA	1,334	-	-	1,184	50	-	-	-	100
VIRGINIA	7,026	6,655	91	-	200	80	-	-	-
W VIRGINIA	407	29	-	-	378	-	-	-	-
E S CENTRAL	18,272	5,940	3,755	8,193	151	233	-	-	-
ALABAMA	3,944	3,934	-	-	10	-	-	-	-
KENTUCKY	279	195	49	-	35	-	-	-	-
MISSISSIPPI	374	359	5	-	10	-	-	-	-
TENNESSEE	13,675	1,452	3,701	8,193	96	233	-	-	-
W S CENTRAL	11,713	3,962	157	-	7,594	-	-	-	-
ARKANSAS	30	-	-	-	30	-	-	-	-
LOUISIANA	5,132	152	-	-	4,980	-	-	-	-
OKLAHOMA	79	39	-	-	40	-	-	-	-
TEXAS	6,472	3,771	157	-	2,544	-	-	-	-

VERMONT	417	-	317	-	100	-	-	-	-
M ATLANTIC	55,666	11,491	2,895	19,799	5,915	13,962	1,204	-	400
NEW JERSEY	5,047	3,808	499	-	350	390	-	-	-
NEW YORK	33,856	6,492	10	9,280	3,203	13,572	1,149	-	150
PENN	16,763	1,191	2,386	10,519	2,362	-	55	-	250
E N CENTRAL	100,124	11,092	1,637	1,142	8,868	77,193	192	-	-
ILLINOIS	85,223	858	17	-	7,055	77,193	100	-	-
INDIANA	790	244	-	-	546	-	-	-	-
MICHIGAN	903	386	40	-	477	-	-	-	-
OHIO	10,074	8,370	180	1,142	290	-	92	-	-
WISCONSIN	3,134	1,234	1,400	-	500	-	-	-	-
W N CENTRAL	10,802	1,696	1,638	-	6,639	829	-	-	-
IOWA	1,501	-	-	-	672	829	-	-	-
KANSAS	212	53	-	-	159	-	-	-	-
MINNESOTA	4,065	907	138	-	3,020	-	-	-	-
MISSOURI	2,214	414	-	-	1,800	-	-	-	-
NEBRASKA	1,185	281	-	-	904	-	-	-	-
N DAKOTA	125	41	-	-	84	-	-	-	-
S DAKOTA	1,500	-	1,500	-	-	-	-	-	-
S ATLANTIC	77,025	70,382	1,521	1,184	3,657	80	100	-	101
DELAWARE	-	-	-	-	-	-	-	-	-
DIST OF COL	5,126	4,291	700	-	35	-	100	-	-
FLORIDA	30,810	29,996	1	-	813	-	-	-	-
GEORGIA	2,263	823	-	-	1,440	-	-	-	-
MARYLAND	29,653	28,584	729	-	339	-	-	-	1
N CAROLINA	406	4	-	-	402	-	-	-	-
S CAROLINA	1,334	-	-	1,184	50	-	-	-	100
VIRGINIA	7,026	6,655	91	-	200	80	-	-	-
W VIRGINIA	407	29	-	-	378	-	-	-	-
E S CENTRAL	18,272	5,940	3,755	8,193	151	233	-	-	-
ALABAMA	3,944	3,934	-	-	10	-	-	-	-
KENTUCKY	279	195	49	-	35	-	-	-	-
MISSISSIPPI	374	359	5	-	10	-	-	-	-
TENNESSEE	13,675	1,452	3,701	8,193	96	233	-	-	-
W S CENTRAL	11,713	3,962	157	-	7,594	-	-	-	-
ARKANSAS	30	-	-	-	30	-	-	-	-
LOUISIANA	5,132	152	-	-	4,980	-	-	-	-
OKLAHOMA	79	39	-	-	40	-	-	-	-
TEXAS	6,472	3,771	157	-	2,544	-	-	-	-
MOUNTAIN	102,411	15,246	15,254	27,552	2,231	41,284	467	377	-
ARIZONA	1,257	1,056	-	-	74	-	-	127	-
COLORADO	8,234	7,682	-	-	302	-	-	250	-
IDAHO	20,325	7	800	11,627	10	7,881	-	-	-
MONTANA	516	1	-	-	515	-	-	-	-
NEVADA	16,903	1,819	13,440	928	234	482	-	-	-
NEW MEXICO	54,141	4,622	599	14,997	135	32,921	467	-	-
UTAH	604	59	15	-	530	-	-	-	-
WYOMING	431	-	-	-	431	-	-	-	-
PACIFIC	178,312	50,730	25,359	52,609	5,982	40,570	244	2,493	325
ALASKA	1,387	1,337	-	-	50	-	-	-	-
CALIFORNIA	119,784	47,122	23,907	2,273	4,867	40,570	244	576	225
HAWAII	2,230	596	1,200	-	334	-	-	-	100
OREGON	1,214	645	1	-	568	-	-	-	-
WASHINGTON	53,697	1,030	251	50,336	163	-	-	1,917	-
OUT AREAS	5,177	73	-	-	991	3,800	-	313	-
OFF ABROAD	10,843	10,759	-	-	-	-	-	84	-

NOTE- THE OBLIGATIONS OF THE ELEVEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 98 PERCENT OF TOTAL FEDERAL R&D PLANT OBLIGATIONS IN FY 1971.

TABLE C-87. FEDERAL OBLIGATIONS FOR R&D PLANT, BY GEOGRAPHIC DIVISION, STATE, AND AGENCY, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

GEOGRAPHIC DIVISION AND STATE	TOTAL	DEPT. OF AGRI- CULTURE	DEPT. OF COMMERCE	DEPT. OF DEFENSE	DEPT. OF HEALTH, EDUCATION & WELFARE	DEPT. OF INTERIOR	DEPT. OF TRANS- PORTATION	ATOMIC ENERGY COMMISSION	NATIONAL AERO- NAUTICS & SPACE ADMIN	NATIONAL SCIENCE FOUNDATION	OTHER (1)
TOT, ALL ST	586,019	5,104	9,175	153,665	17,362	8,504	10,788	312,243	40,239	27,852	1,087
NEW ENGLAND	15,674	-	-	6,206	2,141	300	695	2,411	294	3,564	63
CONNECTICUT	1,516	-	-	102	-	-	695	328	-	391	-
MAINE	-	-	-	-	-	-	-	-	-	-	-
MASS	9,700	-	-	4,081	397	300	-	2,043	294	2,585	-
NEW HAMP	1,972	-	-	40	1,697	-	-	-	-	235	-
RHODE ISL	2,069	-	-	1,566	47	-	-	40	-	253	63
VERMONT	417	-	-	317	-	-	-	-	-	100	-
M ATLANTIC	55,666	16	3,767	8,346	14	396	315	37,044	463	5,305	-
NEW JERSEY	5,047	-	167	3,426	-	341	251	657	-	205	-
NEW YORK	33,856	-	3,600	2,928	14	-	-	23,367	392	3,555	-
PENN	16,763	16	-	1,992	-	55	64	13,020	71	1,545	-
E N CENTRAL	100,124	502	-	13,111	-	110	-	80,894	2,521	2,486	500
ILLINOIS	85,223	-	-	6,192	-	100	-	77,565	2	1,364	-
INDIANA	790	-	-	378	-	-	-	133	66	213	-
MICHIGAN	903	16	-	186	-	-	-	178	234	289	-
OHIO	10,074	-	-	5,330	-	10	-	1,361	1,713	160	500
WISCONSIN	3,134	486	-	25	-	-	-	1,657	506	460	-
W N CENTRAL	10,802	882	-	338	5,597	1,565	16	1,078	639	588	99
IOWA	1,501	-	-	-	436	50	-	829	-	186	-
KANSAS	212	53	-	-	-	-	-	128	-	31	-
MINNESOTA	4,065	522	-	113	2,932	-	16	121	225	37	99
MISSOURI	2,214	-	-	225	1,375	-	-	-	414	200	-
NEBRASKA	1,185	281	-	-	854	-	-	-	-	50	-
N DAKOTA	125	26	-	-	-	15	-	-	-	84	-
S DAKOTA	1,500	-	-	-	-	1,500	-	-	-	-	-
S ATLANTIC	77,025	3,037	4,761	53,438	1,633	205	865	1,355	7,535	3,930	266
DELAWARE	-	-	-	-	-	-	-	-	-	-	-
DIST OF COL	5,126	-	-	4,765	-	-	-	-	70	185	106
FLORIDA	30,810	57	4,098	21,526	-	30	-	8	3,823	1,268	-
GEORGIA	2,263	106	-	10	547	-	-	-	-	1,440	160
MARYLAND	29,653	2,845	663	22,415	1,086	25	485	72	1,855	207	-
N CAROLINA	406	-	-	154	-	-	-	-	-	252	-
S CAROLINA	1,334	-	-	-	-	100	-	1,184	-	50	-
VIRGINIA	7,026	-	-	4,568	-	-	380	91	1,787	200	-
W VIRGINIA	407	29	-	-	-	50	-	-	-	328	-
E S CENTRAL	18,272	132	-	3,652	-	-	464	12,274	1,665	85	-
ALABAMA	3,944	-	-	2,209	-	-	464	-	1,261	10	-
KENTUCKY	279	-	-	11	-	-	-	49	184	35	-
MISSISSIPPI	374	132	-	232	-	-	-	-	-	10	-
TENNESSEE	13,675	-	-	1,200	-	-	-	12,225	220	30	-
W S CENTRAL	11,713	60	-	1,104	6,896	61	-	30	2,638	908	16
ARKANSAS	30	-	-	-	-	-	-	-	-	30	-
LOUISIANA	5,132	18	-	-	4,958	-	-	-	134	22	-
OKLAHOMA	79	2	-	21	-	-	-	-	-	40	16
TEXAS	6,472	40	-	1,083	1,938	61	-	30	2,504	816	-
MOUNTAIN	102,411	1	123	8,755	179	256	7,259	84,069	-	1,769	-
ARIZONA	1,257	-	-	1,056	-	-	-	44	-	157	-
COLORADO	8,234	-	123	406	10	39	7,259	1	-	396	-
IDAHO	20,325	-	-	10	-	-	-	20,315	-	-	-
MONTANA	516	1	-	15	-	-	-	-	-	500	-

ILLINOIS	85,223	-	-	6,192	-	100	-	77,565	2	1,364	-
INDIANA	790	-	-	378	-	-	-	133	66	213	-
MICHIGAN	903	16	-	186	-	-	-	178	234	289	-
OHIO	10,074	-	-	5,330	-	10	-	1,361	1,713	160	500
WISCONSIN	3,134	486	-	25	-	-	-	1,657	506	460	-
W N CENTRAL	10,802	882	-	338	5,597	1,565	16	1,078	639	588	99
IOWA	1,501	-	-	-	436	50	-	829	-	186	-
KANSAS	212	53	-	-	-	-	-	128	-	31	-
MINNESOTA	4,065	522	-	113	2,932	-	16	121	225	37	99
MISSOURI	2,214	-	-	225	1,375	-	-	-	414	200	-
NEBRASKA	1,185	281	-	-	854	-	-	-	-	50	-
N DAKOTA	125	26	-	-	-	15	-	-	-	84	-
S DAKOTA	1,500	-	-	-	-	1,500	-	-	-	-	-
S ATLANTIC	77,025	3,037	4,761	53,438	1,633	205	865	1,355	7,535	3,930	266
DELAWARE	-	-	-	-	-	-	-	-	-	-	-
DIST OF COL	5,126	-	-	4,765	-	-	-	-	70	185	106
FLORIDA	30,810	57	4,098	21,526	-	30	-	8	3,823	1,268	-
GEORGIA	2,263	106	-	10	547	-	-	-	-	1,440	160
MARYLAND	29,653	2,845	663	22,415	1,086	25	485	72	1,855	207	-
N CAROLINA	406	-	-	154	-	-	-	-	-	252	-
S CAROLINA	1,334	-	-	-	-	100	-	1,184	-	50	-
VIRGINIA	7,026	-	-	4,568	-	-	380	91	1,787	200	-
W VIRGINIA	407	29	-	-	-	50	-	-	-	328	-
E S CENTRAL	18,272	132	-	3,652	-	-	464	12,274	1,665	85	-
ALABAMA	3,944	-	-	2,209	-	-	464	-	1,261	10	-
KENTUCKY	279	-	-	11	-	-	-	49	184	35	-
MISSISSIPPI	374	132	-	232	-	-	-	-	-	10	-
TENNESSEE	13,675	-	-	1,200	-	-	-	12,225	220	30	-
W S CENTRAL	11,713	60	-	1,104	6,896	61	-	30	2,638	908	16
ARKANSAS	30	-	-	-	-	-	-	-	-	30	-
LOUISIANA	5,132	18	-	-	4,958	-	-	-	134	22	-
OKLAHOMA	79	2	-	21	-	-	-	-	-	40	16
TEXAS	6,472	40	-	1,083	1,938	61	-	30	2,504	816	-
MOUNTAIN	102,411	1	123	8,755	179	256	7,259	84,069	-	1,769	-
ARIZONA	1,257	-	-	1,056	-	-	-	44	-	157	-
COLORADO	8,234	-	123	406	10	39	7,259	1	-	396	-
IDAHO	20,325	-	-	10	-	-	-	20,315	-	-	-
MONTANA	516	1	-	15	-	-	-	-	-	500	-
NEVADA	16,903	-	-	1,829	169	-	-	14,850	-	55	-
NEW MEXICO	54,141	-	-	5,170	-	197	-	48,639	-	135	-
UTAH	604	-	-	269	-	20	-	220	-	95	-
WYOMING	431	-	-	-	-	-	-	-	-	431	-
PACIFIC	178,312	474	524	47,910	875	5,611	1,174	92,913	24,484	4,204	143
ALASKA	1,387	-	-	123	-	-	-	-	1,214	50	-
CALIFORNIA	119,784	-	-	46,586	875	4,625	1,174	40,356	23,242	2,926	-
HAWAII	2,230	-	524	1,200	-	-	-	3	-	503	-
OREGON	1,214	474	-	1	-	-	-	8	28	560	143
WASHINGTON	53,697	-	-	-	-	986	-	52,546	-	165	-
OUT AREAS	5,177	-	-	46	27	-	-	91	-	5,013	-
OFF ABROAD	10,843	-	-	10,759	-	-	-	84	-	-	-

NOTE- THE OBLIGATIONS OF THE ELEVEN MAJOR R&D SUPPORTING AGENCIES INCLUDED IN THIS TABLE REPRESENT MORE THAN 98 PERCENT OF TOTAL R&D PLANT OBLIGATIONS IN FY 1971

(1) OTHER - INCLUDES ENVIRONVENTAL PROTECTION AGENCY AND OFFICE OF ECONOMIC OPPORTUNITY

TABLE C-88. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY, FISCAL YEAR 1971, 1972, 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	1971			1972			1973		
	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)
TOTAL, ALL AGENCIES	4,165,590	2,512,962	60.3	4,509,060	2,588,107	57.3	4,597,752	2,657,769	57.8
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL	226,515	179,273	79.1	251,173	185,823	73.9	248,238	184,859	74.4
AGRICULTURAL RESEARCH SERVICE	162,431	126,707	78.0	183,137	130,308	71.1	178,672	128,563	71.9
COOPERATIVE STATE RESEARCH SERVICE	2,112	2,112	100.0	2,516	2,516	100.0	2,499	2,499	100.0
ECONOMIC RESEARCH SERVICE	15,106	13,143	87.0	15,438	12,891	83.5	16,236	13,071	80.5
FARMER COOPERATIVE SERVICE	920	582	63.2	1,034	879	85.0	1,034	879	85.0
FOREST SERVICE	45,207	36,165	79.9	48,355	38,683	79.9	49,091	39,272	79.9
NATIONAL AGRICULTURAL LIBRARY	183	140	76.5	187	159	85.0	161	160	99.3
STATISTICAL REPORTING SERVICE	556	424	76.2	506	387	76.4	545	415	76.1
DEPARTMENT OF COMMERCE, TOTAL	92,352	53,215	57.6	109,078	61,162	56.0	122,621	69,096	56.3
ECONOMIC DEVELOPMENT ADMINISTRATION	1,308	1,034	79.0	1,408	1,124	79.8	1,471	1,174	79.8
MARITIME ADMINISTRATION	1,817	891	49.0	2,567	700	27.2	3,374	974	28.8
NATIONAL BUREAU OF STANDARDS	31,288	22,884	73.1	34,073	25,129	73.7	40,581	29,929	73.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	51,204	23,554	46.0	63,039	28,999	46.0	68,950	31,717	46.0
OFFICE OF MINORITY BUSINESS ENTERPRISE.	-	-	-	22	20	90.9	68	60	88.2
OFFICE OF TELECOMMUNICATIONS	2,107	1,474	69.9	3,774	1,998	52.9	4,950	2,444	49.3
PATENT OFFICE	577	372	64.4	584	502	85.9	606	524	86.4
SOCIAL AND ECONOMIC STATISTICS ADMIN	4,051	3,006	74.2	3,611	2,690	74.4	2,621	2,274	86.7
DEPARTMENT OF DEFENSE, TOTAL	2,200,922	1,223,787	55.6	2,418,343	1,272,670	52.6	2,420,561	1,309,094	54.0
DEPARTMENT OF THE ARMY	650,382	383,190	58.9	699,548	401,410	57.3	694,541	418,432	60.2
DEPARTMENT OF THE NAVY	737,717	424,772	57.5	812,960	456,200	56.1	816,263	463,500	56.7
DEPARTMENT OF THE AIR FORCE	676,635	361,735	53.4	760,314	358,219	47.1	765,853	370,503	48.3
DEFENSE AGENCIES	135,835	52,678	38.7	142,634	53,793	37.7	140,879	54,949	39.0
DEPARTMENTWIDE FUNDS	353	1,412	400.0	2,887	3,048	105.5	3,025	1,710	56.5
DEPT. OF HEALTH, EDUC. & WELFARE, TOTAL	297,463	184,618	62.0	334,113	217,491	65.0	369,777	238,868	64.5
FOOD AND DRUG ADMINISTRATION	16,438	12,652	76.9	23,239	19,521	84.0	28,949	24,317	83.9
HEALTH SERVICES & MENTAL HEALTH ADMIN	61,565	46,356	75.2	77,756	58,731	75.5	78,503	58,973	75.1
NATIONAL INSTITUTE OF EDUCATION	-	-	-	-	-	-	21,533	12,533	58.2
NATIONAL INSTITUTES OF HEALTH	204,629	117,734	57.5	216,207	130,205	60.2	225,918	135,741	60.0
OFFICE OF CHILD DEVELOPMENT	334	268	80.2	528	422	79.9	582	466	80.0
OFFICE OF EDUCATION	3,856	2,988	77.4	4,259	3,305	77.6	1,785	1,237	69.2
SOCIAL AND REHABILITATION SERVICE	328	261	79.5	130	104	80.0	144	115	79.8
SOCIAL SECURITY ADMINISTRATION	10,313	4,359	42.2	11,994	5,203	43.3	12,363	5,486	44.3
DEPARTMENT OF HOUSING & URBAN DEVELOP	4,174	1,819	43.5	7,348	3,463	47.1	10,701	4,661	43.5
DEPARTMENT OF THE INTERIOR, TOTAL	111,844	79,959	71.4	127,163	88,477	69.5	142,105	93,128	65.5
BONNEVILLE POWER ADMINISTRATION	969	695	71.7	1,799	1,343	74.6	1,533	1,150	75.0
BUREAU OF LAND MANAGEMENT	431	340	78.8	493	400	81.1	485	400	82.4
BUREAU OF MINES	47,730	33,000	69.1	52,789	36,000	68.1	55,330	37,200	67.2
BUREAU OF OUTDOOR RECREATION	85	75	88.2	85	82	96.4	82	75	91.4
BUREAU OF RECLAMATION	3,549	2,126	59.9	4,217	2,542	60.2	3,964	2,313	58.3
BUREAU OF SPORT FISHERIES & WILDLIFE	13,086	8,464	64.6	13,937	9,139	65.5	15,699	9,921	63.1
GEOLOGICAL SURVEY	42,912	32,959	76.8	50,288	36,222	72.0	61,213	39,146	63.9
NATIONAL PARK SERVICE	483	219	45.3	549	279	50.8	549	282	51.3
OFFICE OF COAL RESEARCH	492	362	73.5	598	481	80.4	843	662	78.5
OFFICE OF SALINE WATER	1,267	1,124	88.7	1,410	1,245	88.2	1,410	1,245	88.2
OFFICE OF THE SECRETARY	25	21	84.0	65	49	75.3	65	49	75.3
OFFICE OF WATER RESOURCES RESEARCH	815	574	70.4	933	695	74.4	932	685	73.4
DEPARTMENT OF JUSTICE, TOTAL	1,526	1,002	65.6	2,440	1,698	69.5	3,799	2,306	60.7
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	184	31	16.8	63	13	20.6	63	13	20.6
BUREAU OF PRISONS	170	130	76.4	240	190	79.1	260	218	83.8
FEDERAL BUREAU OF INVESTIGATION	115	115	100.0	120	120	100.0	150	150	100.0
LAW ENFORCEMENT ASSISTANCE ADMIN	1,057	726	68.6	2,017	1,375	68.1	3,325	1,925	57.8

CONTINUED ON NEXT PAGE

TABLE C-88. FEDERAL OBLIGATIONS FOR TOTAL RESEARCH AND DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY, FISCAL YEAR 1971, 1972, 1973

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	1971			1972			1973		
	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)
DEPARTMENT OF LABOR, TOTAL..............	9,787	8,690	88.7	11,777	9,949	84.4	13,189	10,863	82.3
BUREAU OF LABOR STATISTICS..............	3,756	3,192	84.9	4,503	3,412	75.7	4,849	3,764	77.6
EMPLOYMENT STANDARDS ADMINISTRATION....	1,431	1,363	95.2	1,708	1,566	91.6	1,874	1,721	91.8
LABOR-MANAGEMENT SERVICES ADMIN.........	547	431	78.7	856	682	79.6	1,164	915	78.6
MANPOWER ADMINISTRATION.................	3,631	3,449	94.9	4,162	3,953	94.9	4,158	3,949	94.9
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	196	60.1	380	228	60.0	676	406	60.0
OFFICE OF THE SECRETARY.................	96	59	61.4	168	108	64.2	468	108	23.0
DEPARTMENT OF STATE, TOTAL..............	6,188	4,895	79.1	3,843	3,127	81.3	8,296	6,620	79.7
DEPARTMENTAL FUNDS......................	104	71	68.2	109	78	71.5	109	78	71.5
AGENCY FOR INTERNATIONAL DEVELOPMENT...	6,084	4,824	79.2	3,734	3,049	81.6	8,187	6,542	79.9
DEPARTMENT OF TRANSPORTATION, TOTAL....	101,363	56,947	56.1	110,910	67,918	61.2	117,781	63,005	53.4
FEDERAL AVIATION ADMINISTRATION.........	56,600	36,020	63.6	53,166	37,216	69.9	35,352	24,746	69.9
FEDERAL HIGHWAY ADMINISTRATION..........	4,296	4,080	94.9	4,408	4,186	94.9	6,785	6,445	94.9
FEDERAL RAILROAD ADMINISTRATION.........	12,642	2,860	22.6	14,085	4,151	29.4	26,817	5,502	20.5
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	8,581	4,558	53.1	17,037	9,541	56.0	21,593	12,092	55.9
OFFICE OF THE SECRETARY.................	4,929	3,000	60.8	8,670	3,900	44.9	11,723	5,600	47.7
UNITED STATES COAST GUARD...............	9,501	2,578	27.1	7,872	4,387	55.7	7,025	2,720	38.7
URBAN MASS TRANSPORTATION ADMIN.........	4,814	3,851	79.9	5,672	4,537	79.9	8,486	5,900	69.5
DEPARTMENT OF THE TREASURY, TOTAL......	801	556	69.4	1,000	630	63.0	952	688	72.2
BUREAU OF ENGRAVING AND PRINTING.......	801	556	69.4	1,000	630	63.0	952	698	72.2
OTHER AGENCIES									
ACTION..................................	31	28	90.3	1	1	100.0	20	13	65.0
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	435	79.9	581	435	74.8	567	396	69.8
ATOMIC ENERGY COMMISSION................	16,801	8,362	49.7	14,997	7,561	50.4	16,161	8,471	52.4
CIVIL AERONAUTICS BOARD.................	277	270	97.4	294	289	98.2	297	289	97.3
CIVIL SERVICE COMMISSION................	550	550	100.0	664	642	96.6	702	678	96.5
ENVIRONMENTAL PROTECTION AGENCY.........	58,576	18,295	31.2	66,584	23,619	35.4	71,189	23,903	33.5
FEDERAL COMMUNICATIONS COMMISSION......	616	616	100.0	574	574	100.0	603	603	100.0
FEDERAL HOME LOAN BANK BOARD............	395	258	65.3	503	298	59.2	407	306	75.1
FEDERAL TRADE COMMISSION................	440	440	100.0	580	580	100.0	633	633	100.0
GENERAL SERVICES ADMINISTRATION.........	124	93	75.0	194	146	75.2	92	70	76.0
LIBRARY OF CONGRESS.....................	2,434	1,456	59.8	2,377	1,976	83.1	2,435	2,030	83.3
NATIONAL AERONAUTICS & SPACE ADMIN.....	909,065	591,358	65.0	911,853	541,513	59.3	898,696	530,255	59.0
NATIONAL SCIENCE FOUNDATION.............	19,362	16,570	85.5	19,144	16,630	86.8	19,903	17,910	89.9
OFFICE OF ECONOMIC OPPORTUNITY..........	11,494	11,494	100.0	7,700	7,700	100.0	7,100	7,100	100.0
OFFICE OF EMERGENCY PREPAREDNESS........	272	163	59.9	255	153	60.0	255	153	60.0
OFFICE OF SCIENCE AND TECHNOLOGY........	2,030	1,214	59.8	2,048	1,228	59.9	2,091	1,253	59.9
OFFICE OF TELECOMMUNICATIONS POLICY....	50	50	100.0	100	100	100.0	100	100	100.0
POSTAL SERVICE..........................	5,138	4,391	85.4	9,060	3,780	41.7	11,971	4,571	38.1
SMITHSONIAN INSTITUTION.................	13,294	9,386	70.6	16,529	12,302	74.4	20,595	14,027	68.1
TENNESSEE VALLEY AUTHORITY..............	9,153	7,047	76.9	10,794	8,311	76.9	12,143	9,350	76.9
US ARMS CONTROL & DISARMAMENT AGENCY...	751	375	49.9	762	381	50.0	710	345	48.5
UNITED STATES INFORMATION AGENCY........	120	90	75.0	120	90	75.0	100	75	75.0
VETERANS ADMINISTRATION.................	61,138	45,260	74.0	66,158	47,390	71.6	72,964	52,050	71.3

TABLE C-89. FEDERAL OBLIGATIONS FOR BASIC RESEARCH TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY, FISCAL YEAR 1971, 1972, 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	1971			1972			1973		
	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)
TOTAL, ALL AGENCIES....................	534,631	346,316	64.7	577,864	372,063	64.3	590,325	365,962	61.9
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	86,500	68,978	79.7	97,179	71,313	73.3	96,377	71,050	73.7
AGRICULTURAL RESEARCH SERVICE..........	65,833	51,950	78.9	75,272	53,426	70.9	73,749	52,711	71.4
COOPERATIVE STATE RESEARCH SERVICE.....	803	803	100.0	956	956	100.0	950	950	100.0
ECONOMIC RESEARCH SERVICE..............	4,523	3,943	87.1	4,631	3,867	83.5	4,861	3,927	80.7
FARMER COOPERATIVE SERVICE.............	203	173	85.2	207	176	85.0	207	176	85.0
FOREST SERVICE.........................	15,091	12,073	80.0	16,072	12,856	79.9	16,563	13,250	79.9
STATISTICAL REPORTING SERVICE..........	47	36	76.5	41	32	78.0	47	36	76.5
DEPARTMENT OF COMMERCE, TOTAL..........	35,321	20,274	57.3	41,822	23,348	55.8	45,476	25,059	55.1
MARITIME ADMINISTRATION................	39	18	46.1	416	79	18.9	523	48	9.1
NATIONAL BUREAU OF STANDARDS...........	14,035	10,265	73.1	14,657	10,810	73.7	15,089	11,128	73.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	20,493	9,427	46.0	25,786	11,862	46.0	28,692	13,198	45.9
OFFICE OF TELECOMMUNICATIONS...........	470	329	70.0	664	352	53.0	871	430	49.3
SOCIAL AND ECONOMIC STATISTICS ADMIN...	284	235	82.7	299	245	81.9	301	255	84.7
DEPARTMENT OF DEFENSE, TOTAL...........	98,998	64,992	65.5	106,884	68,958	64.5	111,498	68,594	61.5
DEPARTMENT OF THE ARMY.................	27,512	20,819	75.6	29,534	21,577	73.0	29,162	20,901	71.6
DEPARTMENT OF THE NAVY.................	27,905	18,417	65.9	30,817	20,339	65.9	31,288	20,650	65.9
DEPARTMENT OF THE AIR FORCE............	42,733	25,356	59.3	45,296	26,615	58.7	49,700	26,598	53.5
DEFENSE AGENCIES.......................	848	400	47.1	1,237	427	34.5	1,348	445	33.0
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	67,466	42,431	62.8	76,692	50,063	65.2	83,757	53,354	63.7
HEALTH SERVICES & MENTAL HEALTH ADMIN..	23,492	16,915	72.0	30,954	22,287	72.0	31,155	22,432	72.0
NATIONAL INSTITUTE OF EDUCATION........	-	-	-	-	-	-	5,256	2,256	42.9
NATIONAL INSTITUTES OF HEALTH..........	43,400	24,970	57.5	45,080	27,148	60.2	46,800	28,120	60.0
OFFICE OF EDUCATION....................	141	113	80.1	150	120	80.0	1	1	100.0
SOCIAL SECURITY ADMINISTRATION.........	433	433	100.0	508	508	100.0	545	545	100.0
DEPARTMENT OF THE INTERIOR, TOTAL......	41,218	31,260	75.8	48,049	34,671	72.1	55,366	36,285	65.5
BUREAU OF MINES........................	5,835	4,400	75.4	7,108	5,400	75.9	6,090	4,700	77.1
BUREAU OF RECLAMATION..................	27	16	59.2	65	38	58.4	73	44	60.2
BUREAU OF SPORT FISHERIES & WILDLIFE...	3,526	2,360	66.9	3,862	2,539	65.7	3,801	2,521	66.3
GEOLOGICAL SURVEY......................	31,456	24,161	76.8	36,513	26,300	72.0	44,906	28,632	63.7
NATIONAL PARK SERVICE..................	46	46	100.0	142	87	61.2	142	87	61.2
OFFICE OF SALINE WATER.................	155	155	100.0	155	155	100.0	155	155	100.0
OFFICE OF WATER RESOURCES RESEARCH.....	173	122	70.5	204	152	74.5	199	146	73.3
DEPARTMENT OF LABOR, TOTAL.............	2,072	1,616	77.9	2,472	1,890	76.4	2,343	1,959	83.6
BUREAU OF LABOR STATISTICS.............	1.403	1,070	76.2	1,484	1,083	72.9	1,087	957	88.0
LABOR-MANAGEMENT SERVICES ADMIN........	547	431	78.7	856	682	79.6	1,164	915	78.6
MANPOWER ADMINISTRATION................	122	115	94.2	132	125	94.6	92	87	94.5
DEPARTMENT OF TRANSPORTATION, TOTAL....	62	29	46.7	85	55	64.7	94	34	36.1
FEDERAL HIGHWAY ADMINISTRATION.........	8	7	87.5	8	7	87.5	13	12	92.3
FEDERAL RAILROAD ADMINISTRATION........	11	1	9.0	12	1	8.3	22	2	9.0
UNITED STATES COAST GUARD..............	43	21	48.8	65	47	72.3	59	20	33.8
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	735	419	57.0	479	266	55.5	510	281	55.0
CIVIL SERVICE COMMISSION...............	136	136	100.0	117	117	100.0	124	124	100.0
ENVIRONMENTAL PROTECTION AGENCY........	80	80	100.0	84	84	100.0	88	88	100.0
NATIONAL AERONAUTICS & SPACE ADMIN.....	171,544	91,808	53.5	168,095	92,176	54.8	159,142	82,335	51.7
NATIONAL SCIENCE FOUNDATION............	13,545	12,190	89.9	15,174	13,650	89.9	11,045	9,940	89.9
OFFICE OF ECONOMIC OPPORTUNITY.........	287	287	100.0	731	731	100.0	317	317	100.0
OFFICE OF SCIENCE AND TECHNOLOGY.......	406	240	59.1	410	246	60.0	418	250	59.8
SMITHSONIAN INSTITUTION................	13,294	9,386	70.6	16,529	12,302	74.4	20,595	14,027	68.1
VETERANS ADMINISTRATION................	2,967	2,190	73.8	3,062	2,193	71.6	3,175	2,265	71.3

TABLE C-90. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH TO INTRAMURAL PERFORMERS
FOR PERSONNEL COSTS, BY AGENCY, FISCAL YEAR 1971, 1972, 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	1971			1972			1973		
	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)
TOTAL, ALL AGENCIES....................	1,498,532	928,129	61.9	1,594,053	1,003,859	62.9	1,682,696	1,043,364	62.0
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	128,331	101,789	79.3	142,034	105,718	74.4	140,081	105,077	75.0
AGRICULTURAL RESEARCH SERVICE..........	86,054	67,155	78.0	97,132	69,063	71.1	94,428	68,138	72.1
COOPERATIVE STATE RESEARCH SERVICE.....	1,309	1,309	100.0	1,560	1,560	100.0	1,549	1,549	100.0
ECONOMIC RESEARCH SERVICE..............	10,583	9,200	86.9	10,807	9,024	83.5	11,375	9,144	80.3
FARMER COOPERATIVE SERVICE.............	717	409	57.0	827	703	85.0	827	703	85.0
FOREST SERVICE.........................	29,195	23,355	79.9	31,281	25,025	80.0	31,488	25,190	79.9
NATIONAL AGRICULTURAL LIBRARY..........	183	140	76.5	187	159	85.0	161	160	99.3
STATISTICAL REPORTING SERVICE..........	290	221	76.2	240	184	76.6	253	193	76.2
DEPARTMENT OF COMMERCE, TOTAL..........	43,805	24,815	56.6	51,916	28,629	55.1	59,425	33,191	55.8
ECONOMIC DEVELOPMENT ADMINISTRATION....	635	509	80.1	586	473	80.7	641	518	80.8
MARITIME ADMINISTRATION................	1,457	552	37.8	2,104	574	27.2	2,674	749	28.0
NATIONAL BUREAU OF STANDARDS...........	13,485	9,863	73.1	15,139	11,165	73.7	19,772	14,582	73.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	24,517	11,278	46.0	29,430	13,538	46.0	31,086	14,300	46.0
OFFICE OF TELECOMMUNICATIONS...........	1,637	1,145	69.9	3,110	1,646	52.9	4,079	2,014	49.3
PATENT OFFICE..........................	412	264	64.0	290	251	86.5	121	105	86.7
SOCIAL AND ECONOMIC STATISTICS ADMIN...	1,662	1,204	72.4	1,257	982	78.1	1,052	923	87.7
DEPARTMENT OF DEFENSE, TOTAL...........	515,450	309,232	59.9	546,533	341,356	62.4	565,654	348,039	61.5
DEPARTMENT OF THE ARMY.................	196,112	121,547	61.9	195,865	140,148	71.5	203,843	144,352	70.8
DEPARTMENT OF THE NAVY.................	127,911	81,863	63.9	147,329	94,290	63.9	149,772	95,850	63.9
DEPARTMENT OF THE AIR FORCE............	104,076	75,520	72.5	113,160	75,820	67.0	114,895	76,200	66.3
DEFENSE AGENCIES.......................	86,998	28,890	33.2	89,792	29,550	32.9	96,619	31,427	32.5
DEPARTMENTWIDE FUNDS...................	353	1,412	400.0	387	1,548	400.0	525	210	40.0
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	210,701	129,874	61.6	230,785	150,209	65.0	248,940	161,749	64.9
FOOD AND DRUG ADMINISTRATION...........	16,438	12,652	76.9	23,239	19,521	84.0	28,949	24,317	83.9
HEALTH SERVICES & MENTAL HEALTH ADMIN..	30,557	24,445	79.9	38,569	30,855	79.9	38,714	30,970	79.9
NATIONAL INSTITUTE OF EDUCATION........	-	-	-	-	-	-	9,138	5,138	56.2
NATIONAL INSTITUTES OF HEALTH..........	151,913	87,403	57.5	155,603	93,708	60.2	159,234	95,674	60.0
OFFICE OF CHILD DEVELOPMENT............	235	189	80.4	288	230	79.8	330	264	80.0
OFFICE OF EDUCATION....................	1,370	1,014	74.0	1,500	1,120	74.6	648	358	55.2
SOCIAL AND REHABILITATION SERVICE......	308	245	79.5	100	80	80.0	109	87	79.8
SOCIAL SECURITY ADMINISTRATION.........	9,880	3,926	39.7	11,486	4,695	40.8	11,818	4,941	41.8
DEPARTMENT OF HOUSING & URBAN DEVELOP..	2,629	1,249	47.5	5,462	2,567	46.9	6,793	3,227	47.5
DEPARTMENT OF THE INTERIOR, TOTAL......	53,213	38,279	71.9	55,852	39,628	70.9	57,954	39,954	68.9
BONNEVILLE POWER ADMINISTRATION........	124	61	49.1	132	99	75.0	167	125	74.8
BUREAU OF LAND MANAGEMENT..............	407	320	78.6	468	380	81.1	461	380	82.4
BUREAU OF MINES........................	28,631	21,000	73.3	28,169	20,600	73.1	28,025	20,500	73.1
BUREAU OF OUTDOOR RECREATION...........	85	75	88.2	85	82	96.4	82	75	91.4
BUREAU OF RECLAMATION..................	3,444	2,063	59.9	3,991	2,408	60.3	3,757	2,189	58.2
BUREAU OF SPORT FISHERIES & WILDLIFE...	7,508	4,924	65.5	7,917	5,185	65.4	8,810	5,812	65.9
GEOLOGICAL SURVEY......................	11,456	8,798	76.7	13,370	9,630	72.0	14,861	9,582	64.4
NATIONAL PARK SERVICE..................	437	173	39.5	407	192	47.1	407	195	47.9
OFFICE OF COAL RESEARCH................	149	109	73.1	216	174	80.5	283	222	78.4
OFFICE OF SALINE WATER.................	305	283	92.7	355	325	91.5	355	325	91.5
OFFICE OF THE SECRETARY................	25	21	84.0	13	10	76.9	13	10	76.9
OFFICE OF WATER RESOURCES RESEARCH.....	642	452	70.4	729	543	74.4	733	539	73.5
DEPARTMENT OF JUSTICE, TOTAL...........	492	262	53.2	1,018	663	65.1	1,513	913	60.3
BUREAU OF NARCOTICS AND DANGEROUS DRUGS	184	31	16.8	63	13	20.6	63	13	20.6
LAW ENFORCEMENT ASSISTANCE ADMIN.......	308	231	75.0	955	650	68.0	1,450	900	62.0

CONTINUED ON NEXT PAGE

TABLE C-90. FEDERAL OBLIGATIONS FOR APPLIED RESEARCH TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY, FISCAL YEAR 1971, 1972, 1973

CONTINUED

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	1971			1972			1973		
	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)
DEPARTMENT OF LABOR, TOTAL.............	4,981	4,520	90.7	5,267	4,735	89.8	6,155	5,205	84.5
BUREAU OF LABOR STATISTICS.............	1,450	1,308	90.2	1,576	1,362	86.4	1,810	1,551	85.6
EMPLOYMENT STANDARDS ADMINISTRATION....	1,431	1,363	95.2	1,708	1,566	91.6	1,874	1,721	91.8
MANPOWER ADMINISTRATION................	1,690	1,606	95.0	1,717	1,631	94.9	1,755	1,667	94.9
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	326	196	60.1	150	90	60.0	300	180	60.0
OFFICE OF THE SECRETARY................	84	47	55.9	116	86	74.1	416	86	20.6
DEPARTMENT OF STATE, TOTAL.............	6,158	4,871	79.1	3,813	3,103	81.3	8,266	6,596	79.7
DEPARTMENTAL FUNDS.....................	104	71	68.2	109	78	71.5	109	78	71.5
AGENCY FOR INTERNATIONAL DEVELOPMENT...	6,054	4,800	79.2	3,704	3,025	81.6	8,157	6,518	79.9
DEPARTMENT OF TRANSPORTATION, TOTAL....	53,224	33,154	62.2	60,507	36,420	60.1	70,691	36,056	51.0
FEDERAL AVIATION ADMINISTRATION........	25,940	18,932	72.8	20,750	14,525	70.0	13,798	9,658	69.9
FEDERAL HIGHWAY ADMINISTRATION.........	3,797	3,607	94.9	3,896	3,701	94.9	5,996	5,696	94.9
FEDERAL RAILROAD ADMINISTRATION........	9,666	2,131	22.0	11,608	3,200	27.5	20,771	4,000	19.2
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	6,175	3,211	52.0	12,260	6,866	56.0	15,539	8,702	56.0
OFFICE OF THE SECRETARY................	2,594	2,100	80.9	4,512	2,100	46.5	6,044	3,200	52.9
UNITED STATES COAST GUARD..............	2,386	1,072	44.9	4,387	3,553	80.9	3,914	1,500	38.3
URBAN MASS TRANSPORTATION ADMIN........	2,626	2,101	80.0	3,094	2,475	79.9	4,629	3,300	71.2
DEPARTMENT OF THE TREASURY, TOTAL......	383	224	58.4	542	252	46.4	454	269	59.2
BUREAU OF ENGRAVING AND PRINTING.......	383	224	58.4	542	252	46.4	454	269	59.2
OTHER AGENCIES									
ACTION.................................	31	28	90.3	1	1	100.0	20	13	65.0
ADVISORY COMM ON INTERGOVERNMENTAL REL.	544	435	79.9	581	435	74.8	567	396	69.8
ATOMIC ENERGY COMMISSION...............	4,174	2,149	51.4	4,215	2,175	51.6	5,695	3,165	55.5
CIVIL AERONAUTICS BOARD................	277	270	97.4	294	289	98.2	297	289	97.3
CIVIL SERVICE COMMISSION...............	233	233	100.0	301	290	96.3	318	306	96.2
ENVIRONMENTAL PROTECTION AGENCY........	19,481	6,072	31.1	22,300	7,881	35.3	23,600	7,907	33.5
FEDERAL COMMUNICATIONS COMMISSION......	616	616	100.0	574	574	100.0	603	603	100.0
FEDERAL HOME LOAN BANK BOARD...........	395	258	65.3	503	298	59.2	407	306	75.1
FEDERAL TRADE COMMISSION...............	440	440	100.0	580	580	100.0	633	633	100.0
GENERAL SERVICES ADMINISTRATION........	55	41	74.5	98	74	75.5	90	68	75.5
LIBRARY OF CONGRESS....................	962	952	98.9	1,188	1,005	84.5	1,217	1,032	84.7
NATIONAL AERONAUTICS & SPACE ADMIN.....	375,457	210,667	56.1	380,584	220,830	58.0	389,287	220,756	56.7
NATIONAL SCIENCE FOUNDATION............	3,727	2,500	67.0	1,770	1,000	56.4	5,555	5,000	90.0
OFFICE OF ECONOMIC OPPORTUNITY.........	5,638	5,638	100.0	1,870	1,870	100.0	3,976	3,976	100.0
OFFICE OF EMERGENCY PREPAREDNESS.......	272	163	59.9	255	153	60.0	255	153	60.0
OFFICE OF SCIENCE AND TECHNOLOGY.......	609	365	59.9	614	368	59.9	627	376	59.9
OFFICE OF TELECOMMUNICATIONS POLICY....	50	50	100.0	100	100	100.0	100	100	100.0
POSTAL SERVICE.........................	335	126	37.6	2,000	378	18.9	3,457	457	13.2
TENNESSEE VALLEY AUTHORITY.............	7,324	5,639	76.9	8,951	6,892	76.9	9,995	7,696	76.9
US ARMS CONTROL & DISARMAMENT AGENCY...	540	270	50.0	632	316	50.0	580	280	48.2
UNITED STATES INFORMATION AGENCY.......	108	81	75.0	129	89	74.7	100	75	75.0
VETERANS ADMINISTRATION................	57,897	42,867	74.0	62,794	44,981	71.6	69,391	49,501	71.3

TABLE C-91. FEDERAL OBLIGATIONS FOR DEVELOPMENT TO INTRAMURAL PERFORMERS FOR PERSONNEL COSTS, BY AGENCY, FISCAL YEAR 1971, 1972, 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	1971			1972			1973		
	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)	TOTAL	PERSONNEL COSTS	PERCENT (TENTHS)
TOTAL, ALL AGENCIES....................	2,132,427	1,238,517	58.0	2,337,143	1,212,185	51.8	2,324,731	1,248,443	53.7
DEPARTMENTS									
DEPARTMENT OF AGRICULTURE, TOTAL.......	11,684	8,506	72.8	11,960	8,792	73.5	11,780	8,732	74.1
AGRICULTURAL RESEARCH SERVICE..........	10,544	7,602	72.0	10,733	7,819	72.8	10,495	7,714	73.5
FOREST SERVICE.........................	921	737	80.0	1,002	802	80.0	1,040	832	80.0
STATISTICAL REPORTING SERVICE..........	219	167	76.2	225	171	76.0	245	186	75.9
DEPARTMENT OF COMMERCE, TOTAL..........	13,226	8,126	61.4	15,340	9,185	59.8	17,720	10,846	61.2
ECONOMIC DEVELOPMENT ADMINISTRATION....	673	525	78.0	822	651	79.1	830	656	79.0
MARITIME ADMINISTRATION................	321	321	100.0	47	47	100.0	177	177	100.0
NATIONAL BUREAU OF STANDARDS...........	3,768	2,756	73.1	4,277	3,154	73.7	5,720	4,219	73.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	6,194	2,849	45.9	7,823	3,599	46.0	9,172	4,219	45.9
OFFICE OF MINORITY BUSINESS ENTERPRISE.	-	-	-	22	20	90.9	68	60	88.2
PATENT OFFICE..........................	165	108	65.4	294	251	85.3	485	419	86.3
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,105	1,567	74.4	2,055	1,463	71.1	1,268	1,096	86.4
DEPARTMENT OF DEFENSE, TOTAL...........	1,586,474	849,[illegible]	53.5	1,764,926	862,356	48.8	1,743,409	892,461	51.1
DEPARTMENT OF THE ARMY.................	426,758	240,824	56.4	474,149	239,685	50.5	461,536	253,179	54.8
DEPARTMENT OF THE NAVY.................	581,901	324,492	55.7	634,814	341,571	53.8	635,203	347,000	54.6
DEPARTMENT OF THE AIR FORCE............	529,826	260,859	49.2	601,858	255,784	42.4	601,258	267,705	44.5
DEFENSE AGENCIES.......................	47,989	23,388	48.7	51,605	23,816	46.1	42,912	23,077	53.7
DEPARTMENTWIDE FUNDS...................	-	-	-	2,500	1,500	60.0	2,500	1,500	60.0
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	19,296	12,313	63.8	26,636	17,219	64.6	37,080	23,765	64.0
HEALTH SERVICES & MENTAL HEALTH ADMIN..	7,516	4,996	66.4	8,233	5,589	67.8	8,634	5,571	64.5
NATIONAL INSTITUTE OF EDUCATION........	-	-	-	-	-	-	7,139	5,139	71.9
NATIONAL INSTITUTES OF HEALTH..........	9,316	5,361	57.5	15,524	9,349	60.2	19,884	11,947	60.0
OFFICE OF CHILD DEVELOPMENT............	99	79	79.7	240	192	80.0	252	202	80.1
OFFICE OF EDUCATION....................	2,345	1,861	79.3	2,609	2,065	79.1	1,136	878	77.2
SOCIAL AND REHABILITATION SERVICE......	20	16	80.0	30	24	80.0	35	28	80.0
DEPARTMENT OF HOUSING & URBAN DEVELOP..	1,545	570	36.8	1,886	896	47.5	3,908	1,434	36.6
DEPARTMENT OF THE INTERIOR, TOTAL......	17,413	10,420	59.8	23,262	14,178	60.9	28,785	16,889	58.6
BONNEVILLE POWER ADMINISTRATION........	845	634	75.0	1,667	1,244	74.6	1,366	1,025	75.0
BUREAU OF LAND MANAGEMENT..............	24	20	83.3	25	20	80.0	24	20	83.3
BUREAU OF MINES........................	13,264	7,600	57.2	17,512	10,000	57.1	21,215	12,000	56.5
BUREAU OF RECLAMATION..................	78	47	60.2	161	96	59.6	134	80	59.7
BUREAU OF SPORT FISHERIES & WILDLIFE...	2,052	1,180	57.5	2,158	1,415	65.5	3,088	1,588	51.4
GEOLOGICAL SURVEY......................	-	-	-	405	292	72.0	1,446	932	64.4
OFFICE OF COAL RESEARCH................	343	253	73.7	382	307	80.3	560	440	78.5
OFFICE OF SALINE WATER.................	807	686	85.0	900	765	85.0	900	765	85.0
OFFICE OF THE SECRETARY................	-	-	-	52	39	75.0	52	39	75.0
DEPARTMENT OF JUSTICE, TOTAL...........	1,034	740	71.5	1,422	1,035	72.7	2,285	1,393	60.9
BUREAU OF PRISONS......................	170	130	76.4	240	190	79.1	260	218	83.8
FEDERAL BUREAU OF INVESTIGATION........	115	115	100.0	120	120	100.0	150	150	100.0
LAW ENFORCEMENT ASSISTANCE ADMIN.......	749	495	66.0	1,062	725	68.2	1,875	1,025	54.6
DEPARTMENT OF LABOR, TOTAL.............	2,734	2,554	93.4	4,038	3,324	82.3	4,691	3,699	78.8
BUREAU OF LABOR STATISTICS.............	903	814	90.1	1,443	967	67.0	1,952	1,256	64.3
MANPOWER ADMINISTRATION................	1,819	1,728	94.9	2,313	2,197	94.9	2,311	2,195	94.9
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	-	-	-	230	138	60.0	376	226	60.1
OFFICE OF THE SECRETARY................	12	12	100.0	52	22	42.3	52	22	42.3
DEPARTMENT OF STATE, TOTAL.............	30	24	80.0	30	24	80.0	30	24	80.0
AGENCY FOR INTERNATIONAL DEVELOPMENT...	30	24	80.0	30	24	80.0	30	24	80.0
DEPARTMENT OF TRANSPORTATION, TOTAL....	48,077	23,764	49.4	50,318	31,443	62.4	46,996	26,915	57.2
FEDERAL AVIATION ADMINISTRATION........	30,620	17,088	55.8	32,416	22,691	69.9	21,554	15,098	70.0
FEDERAL HIGHWAY ADMINISTRATION.........	491	466	94.9	504	478	94.8	776	737	94.9
FEDERAL RAILROAD ADMINISTRATION........	2,965	728	24.5	2,465	950	38.5	6,024	1,500	24.9

ECONOMIC DEVELOPMENT ADMINISTRATION....	673	525	78.0	822	651	79.1	830	656	79.0
MARITIME ADMINISTRATION................	321	321	100.0	47	47	100.0	177	177	100.0
NATIONAL BUREAU OF STANDARDS...........	3,768	2,756	73.1	4,277	3,154	73.7	5,720	4,219	73.7
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	6,194	2,849	45.9	7,823	3,599	46.0	9,172	4,219	45.9
OFFICE OF MINORITY BUSINESS ENTERPRISE.	-	-	-	22	20	90.9	68	60	88.2
PATENT OFFICE..........................	165	108	65.4	294	251	85.3	485	419	86.3
SOCIAL AND ECONOMIC STATISTICS ADMIN...	2,105	1,567	74.4	2,055	1,463	71.1	1,268	1,096	86.4
DEPARTMENT OF DEFENSE, TOTAL...........	1,586,474	849,563	53.5	1,764,926	862,356	48.8	1,743,409	892,461	51.1
DEPARTMENT OF THE ARMY.................	426,758	240,824	56.4	474,149	239,685	50.5	461,536	253,179	54.8
DEPARTMENT OF THE NAVY.................	581,901	324,492	55.7	634,814	341,571	53.8	635,203	347,000	54.6
DEPARTMENT OF THE AIR FORCE............	529,826	260,859	49.2	601,858	255,784	42.4	601,258	267,705	44.5
DEFENSE AGENCIES.......................	47,989	23,388	48.7	51,605	23,816	46.1	42,912	23,077	53.7
DEPARTMENTWIDE FUNDS...................	-	-	-	2,500	1,500	60.0	2,500	1,500	60.0
DEPT. OF HEALTH, EDUC, & WELFARE, TOTAL	19,296	12,313	63.8	26,636	17,219	64.6	37,080	23,765	64.0
HEALTH SERVICES & MENTAL HEALTH ADMIN..	7,516	4,996	66.4	8,233	5,589	67.8	8,634	5,571	64.5
NATIONAL INSTITUTE OF EDUCATION........	-	-	-	-	-	-	7,139	5,139	71.9
NATIONAL INSTITUTES OF HEALTH..........	9,316	5,361	57.5	15,524	9,349	60.2	19,884	11,947	60.0
OFFICE OF CHILD DEVELOPMENT............	99	79	79.7	240	192	80.0	252	202	80.1
OFFICE OF EDUCATION....................	2,345	1,861	79.3	2,609	2,065	79.1	1,136	878	77.2
SOCIAL AND REHABILITATION SERVICE......	20	16	80.0	30	24	80.0	35	28	80.0
DEPARTMENT OF HOUSING & URBAN DEVELOP..	1,545	570	36.8	1,886	896	47.5	3,908	1,434	36.6
DEPARTMENT OF THE INTERIOR, TOTAL......	17,413	10,420	59.8	23,262	14,178	60.9	28,785	16,889	58.6
BONNEVILLE POWER ADMINISTRATION........	845	634	75.0	1,667	1,244	74.6	1,366	1,025	75.0
BUREAU OF LAND MANAGEMENT..............	24	20	83.3	25	20	80.0	24	20	83.3
BUREAU OF MINES........................	13,264	7,600	57.2	17,512	10,000	57.1	21,215	12,000	56.5
BUREAU OF RECLAMATION..................	78	47	60.2	161	96	59.6	134	80	59.7
BUREAU OF SPORT FISHERIES & WILDLIFE...	2,052	1,180	57.5	2,158	1,415	65.5	3,088	1,588	51.4
GEOLOGICAL SURVEY......................	-	-	-	405	292	72.0	1,446	932	64.4
OFFICE OF COAL RESEARCH................	343	253	73.7	382	307	80.3	560	440	78.5
OFFICE OF SALINE WATER.................	807	686	85.0	900	765	85.0	900	765	85.0
OFFICE OF THE SECRETARY................	-	-	-	52	39	75.0	52	39	75.0
DEPARTMENT OF JUSTICE, TOTAL...........	1,034	740	71.5	1,422	1,035	72.7	2,285	1,393	60.9
BUREAU OF PRISONS......................	170	130	76.4	240	190	79.1	260	218	83.8
FEDERAL BUREAU OF INVESTIGATION........	115	115	100.0	120	120	100.0	150	150	100.0
LAW ENFORCEMENT ASSISTANCE ADMIN.......	749	495	66.0	1,062	725	68.2	1,875	1,025	54.6
DEPARTMENT OF LABOR, TOTAL.............	2,734	2,554	93.4	4,038	3,324	82.3	4,691	3,699	78.8
BUREAU OF LABOR STATISTICS.............	903	814	90.1	1,443	967	67.0	1,952	1,256	64.3
MANPOWER ADMINISTRATION................	1,819	1,728	94.9	2,313	2,197	94.9	2,311	2,195	94.9
OCCUPATIONAL HEALTH AND SAFETY ADMIN...	-	-	-	230	138	60.0	376	226	60.1
OFFICE OF THE SECRETARY................	12	12	100.0	52	22	42.3	52	22	42.3
DEPARTMENT OF STATE, TOTAL.............	30	24	80.0	30	24	80.0	30	24	80.0
AGENCY FOR INTERNATIONAL DEVELOPMENT...	30	24	80.0	30	24	80.0	30	24	80.0
DEPARTMENT OF TRANSPORTATION, TOTAL....	48,077	23,764	49.4	50,318	31,443	62.4	46,996	26,915	57.2
FEDERAL AVIATION ADMINISTRATION........	30,620	17,088	55.8	32,416	22,691	69.9	21,554	15,088	70.0
FEDERAL HIGHWAY ADMINISTRATION.........	491	466	94.9	504	478	94.8	776	737	94.9
FEDERAL RAILROAD ADMINISTRATION........	2,965	728	24.5	2,465	950	38.5	6,024	1,500	24.9
NATIONAL HIGHWAY TRAFFIC SAFETY ADMIN..	2,406	1,347	55.9	4,777	2,675	55.9	6,054	3,390	55.9
OFFICE OF THE SECRETARY................	2,335	900	38.5	4,158	1,800	43.2	5,679	2,400	42.2
UNITED STATES COAST GUARD..............	7,072	1,485	20.9	3,420	787	23.0	3,052	1,200	39.3
URBAN MASS TRANSPORTATION ADMIN........	2,188	1,750	79.9	2,578	2,062	79.9	3,857	2,600	67.4
DEPARTMENT OF THE TREASURY, TOTAL......	418	332	79.4	458	378	82.5	498	419	84.1
BUREAU OF ENGRAVING AND PRINTING.......	418	332	79.4	458	378	82.5	498	419	84.1
OTHER AGENCIES									
ATOMIC ENERGY COMMISSION...............	11,892	5,794	48.7	10,303	5,120	49.6	9,956	5,025	50.4
CIVIL SERVICE COMMISSION...............	181	181	100.0	246	235	95.5	260	248	95.3
ENVIRONMENTAL PROTECTION AGENCY........	39,015	12,143	31.1	44,200	15,654	35.4	47,500	15,908	33.4
GENERAL SERVICES ADMINISTRATION........	69	52	75.3	96	72	75.0	2	2	100.0
LIBRARY OF CONGRESS....................	1,472	504	34.2	1,189	971	81.6	1,218	998	81.9
NATIONAL AERONAUTICS & SPACE ADMIN.....	362,064	288,883	79.7	363,174	228,507	62.9	350,267	227,164	64.8
NATIONAL SCIENCE FOUNDATION............	2,090	1,880	89.9	2,200	1,980	90.0	3,303	2,970	89.9
OFFICE OF ECONOMIC OPPORTUNITY.........	5,569	5,569	100.0	5,099	5,099	100.0	2,807	2,807	100.0
OFFICE OF SCIENCE AND TECHNOLOGY.......	1,015	609	60.0	1,024	614	59.9	1,046	627	59.9
POSTAL SERVICE.........................	4,803	4,265	88.7	7,060	3,402	48.1	8,514	4,114	48.3
TENNESSEE VALLEY AUTHORITY.............	1,829	1,408	76.9	1,843	1,419	76.9	2,148	1,654	77.0
US ARMS CONTROL & DISARMAMENT AGENCY...	211	105	49.7	130	65	50.0	130	65	50.0
UNITED STATES INFORMATION AGENCY.......	12	9	75.0	1	1	100.0	-	-	-
VETERANS ADMINISTRATION................	274	203	74.0	302	216	71.5	398	284	71.3

Table C-92. Federal expenditures for research, development, and R&D plant, by agency, fiscal years 1940-73

[Millions of dollars]

Agency	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Total, all agencies	74.1	197.9	280.3	602.4	1,377.2	1,590.7	917.8	899.9	854.8	1,082.0	1,082.8
Departments											
Department of Agriculture	29.1	28.3	29.9	30.7	32.1	33.7	36.8	39.2	42.4	50.5	53.0
Department of Commerce[a]	3.3	3.1	3.2	5.2	5.2	5.0	5.0	4.8	8.2	12.5	12.0
Department of Defense, Total	26.4	143.7	211.1	395.1	448.1	513.0	418.0	550.8	592.2	695.4	652.3
Department of the Army[b]	3.8	18.7	68.4	149.0	161.3	134.0	114.0	100.0	116.4	136.6	123.1
Department of the Navy[b]	13.9	24.6	58.9	130.5	176.6	243.0	183.0	293.8	287.5	332.9	310.8
Department of the Air Force[b]	8.7	100.4	83.8	115.6	110.2	136.0	121.0	157.0	188.3	225.9	218.4
Advanced Research Projects Agency[c]	....	....	....	....	....	....	....	....	....	....	....
Departmentwide Funds[c]	....	....	....	....	....	....	....	....	....	....	....
Defense Agencies[c]	....	....	....	....	....	....	....	....	....	....	....
Department of Health, Education, and Welfare[d]	2.8	3.0	3.2	3.2	3.3	3.4	3.5	10.1	22.8	27.9	39.6
Department of the Interior	7.9	9.5	13.5	17.0	20.7	18.0	17.0	20.3	31.4	38.2	32.1
Department of Transportation[a]	....	....	....	....	....	....	....	....	....	....	....
Other Agencies											
Atomic Energy Commission	....	....	....	....	....	....	....	37.7	107.5	196.1	221.4
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	....
Federal Aviation Agency[a]	....	....	....	....	....	....	....	....	....	....	....
Manhattan Engineer District[e]	....	....	....	77.0	730.0	859.0	366.0	186.0	....	....	....
National Aeronautics and Space Administration[f]	2.2	2.6	5.0	9.8	18.4	24.1	23.7	35.2	37.5	48.7	54.5
National Science Foundation	....	....	....	....	....	....	....	....	....	....	....
Office of Economic Opportunity	....	....	....	....	....	....	....	....	....	....	....
Office of Scientific Research and Development	....	5.3	11.0	52.2	86.8	114.5	36.8	5.6	.9	....	....
Veterans Administration	....	....	....	....	....	....	....	....	....	....	....
All Other Agencies	2.4	2.4	3.4	12.2	32.6	20.0	11.0	10.2	11.8	12.8	17.7

Agency	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Total, all agencies	1,300.5	1,816.2	3,101.0	3,147.9	3,308.3	3,446.0	4,461.9	4,990.6	5,806.4	7,744.2	9,287.0
Departments											
Department of Agriculture	52.4	57.1	54.9	55.4	72.0	87.7	97.0	111.8	124.7	131.4	147.7
Department of Commerce[a]	16.9	10.1	13.6	10.6	9.9	20.4	19.8	17.8	30.1	33.1	35.5
Department of Defense, Total	823.4	1,317.0	2,454.8	2,487.2	2,630.2	2,639.0	3,371.4	3,664.2	4,183.3	5,653.8	6,618.1
Department of the Army[b]	161.6	318.0	743.3	815.7	1,012.8	702.4	782.1	873.5	890.9	1,108.9	1,306.0
Department of the Navy[b]	363.8	476.0	678.3	664.7	591.9	635.8	784.9	854.1	1,034.7	1,300.6	1,631.0
Department of the Air Force[b]	297.9	523.0	1,033.2	1,006.8	982.2	1,278.9	1,780.0	1,894.0	2,134.5	2,978.0	3,440.6
Advanced Research Projects Agency[c]	....	....	....	....	....	....	....	3.0	80.9	226.3	206.6
Departmentwide Funds[c]	....	....	....	....	43.3	21.9	24.4	39.6	42.3	40.0	33.9
Defense Agencies[c]	....	....	....	....	....	....	....	....	....	....	....
Department of Health, Education, and Welfare[d]	53.4	64.1	65.2	62.5	70.2	86.2	143.5	180.3	252.8	324.2	374.1
Department of the Interior	32.1	32.8	35.2	39.1	31.9	35.7	42.3	48.9	72.2	65.3	75.1
Department of Transportation[a]	....	....	....	....	....	....	....	....	....	....	....
Other Agencies											
Atomic Energy Commission	242.6	249.6	378.1	383.1	385.4	474.0	656.5	804.2	877.1	985.9	1,111.1
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	....
Federal Aviation Agency	....	....	....	....	....	....	....	4.2	27.6	41.2	52.9
Manhattan Engineer District[e]	....	....	....	....	....	....	....	....	....	....	....
National Aeronautics and Space Administration[f]	61.6	67.4	78.6	89.5	73.8	72.1	76.1	89.2	145.5	401.0	744.3
National Science Foundation	.1	.5	2.1	3.6	8.5	15.4	30.6	33.7	54.1	64.2	82.7
Office of Economic Opportunity	....	....	....	....	....	....	....	....	....	....	....
Office of Scientific Research and Development	....	....	....	....	....	....	....	....	....	....	....
Veterans Administration	....	3.3	4.6	5.1	5.3	6.1	9.4	12.8	16.8	18.6	23.1
All Other Agencies	18.2	14.3	13.9	11.8	21.1	10.4	15.3	23.5	22.2	25.4	22.6

See footnotes at end of table.

Table C-92. Federal expenditures for research, development, and R&D plant, by agency, fiscal years 1940-73 – Continued

[Millions of dollars]

Agency	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
											1972	1973
Total, all agencies	10,386.8	12,012.1	14,707.0	14,888.8	16,017.9	16,859.1	17,048.9	16,347.6	15,735.8	15,992.4	16,733.9	17,326.9
Departments												
Department of Agriculture	155.7	172.5	183.4	205.7	236.3	269.8	286.2	283.8	298.6	318.9	360.7	360.7
Department of Commerce[a]	47.5	70.4	84.5	85.8	71.2	80.5	81.6	78.4	127.9	122.9	157.4	203.1
Department of Defense, Total	6,812.0	6,848.8	7,517.0	6,727.6	6,734.6	7,680.1	8,163.6	7,868.4	7,587.9	7,706.0	8,286.2	8,441.5
Department of the Army[b]	1,243.5	1,421.2	1,413.6	1,428.9	1,485.2	1,734.0	1,539.5	1,609.8	1,771.6	1,670.6	2,048.1	2,068.2
Department of the Navy[b]	1,561.0	1,573.6	1,724.2	1,419.4	1,548.6	1,941.9	2,104.1	2,108.8	2,172.4	2,477.9	2,547.9	2,562.5
Department of the Air Force[b]	3,672.9	3,539.1	3,951.1	3,404.8	3,194.2	3,487.0	3,987.8	3,626.3	3,150.1	3,025.6	3,197.8	3,271.6
Advanced Research Projects Agency[c]	192.9	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Departmentwide Funds[c]	141.7	14.6	21.1	9.9	9.9	9.9	7.2	9.2	5.9	4.5	18.5	46.2
Defense Agencies[c]	-------	300.4	406.9	464.7	496.7	507.3	525.0	514.2	488.0	527.5	473.8	493.1
Department of Health, Education, and Welfare[d]	512.1	632.4	793.4	737.9	879.4	1,075.0	1,283.1	1,220.0	1,261.3	1,326.8	1,520.0	1,760.9
Department of the Interior	86.7	102.7	102.0	118.8	149.3	166.7	195.1	204.2	159.8	185.1	225.8	267.7
Department of Transportation[a]	-------	-------	-------	-------	165.7	239.3	219.1	208.0	262.6	477.8	397.2	334.3
Other Agencies												
Atomic Energy Commission	1,284.3	1,335.6	1,505.0	1,520.0	1,461.9	1,466.9	1,594.3	1,654.0	1,616.0	1,604.9	1,580.0	1,619.5
Environmental Protection Agency	-------	-------	-------	-------	-------	-------	-------	-------	70.2	101.0	157.7	180.7
Federal Aviation Agency	53.7	74.7	74.0	96.4	-------	-------	-------	-------	-------	-------	-------	-------
Manhattan Engineer District[e]	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
National Aeronautics and Space Administration[f]	1,257.0	2,552.3	4,171.0	5,092.9	5,933.0	5,425.7	4,723.7	4,251.7	3,753.1	3,381.9	3,181.0	3,192.4
National Science Foundation	112.6	153.1	202.9	206.3	240.9	294.8	333.6	342.3	324.1	373.9	440.3	489.9
Office of Economic Opportunity	-------	-------	-------	4.2	49.4	36.7	41.0	77.1	79.3	148.7	124.0	113.5
Office of Scientific Research and Development	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Veterans Administration	30.8	33.1	34.1	40.4	42.2	46.4	47.4	54.0	61.7	67.9	77.6	81.8
All Other Agencies	34.3	36.5	39.7	52.5	54.1	77.2	80.2	105.7	133.3	176.6	226.0	280.9

[a] The Department of Transportation, as of 1966, includes the Bureau of Public Roads and the Office of Transportation Research and Development formerly in the Department of Commerce; the Federal Aviation Agency; and the U.S. Coast Guard formerly under the Treasury Department.

[b] Includes pay and allowances of military R&D personnel beginning in fiscal year 1953, and support from procurement appropriations of development, test, and evaluation, starting with fiscal year 1954.

[c] Starting with 1963, Defense Agencies include the Advanced Research Projects Agency (ARPA), and other agencies such as Defense Atomic Support Agency and Defense Communications Agency. With the exception of ARPA, these agencies were previously included in departmentwide funds. Starting with 1963, Departmentwide Funds include Military Assistance, Civil Defense, and Emergency Funds only.

[d] Federal Security Agency prior to fiscal year 1952.

[e] This agency, under the Department of War, is shown separately to identify funds for this atomic energy project from other R&D funds.

[f] National Advisory Committee for Aeronautics prior to fiscal year 1958.

SOURCES: National Science Foundation and Bureau of the Budget (prior to 1952).

Table C-93. Federal expenditures for research and development, by agency, fiscal years 1952-73

[Millions of dollars]

Agency	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Total, all agencies	1,548.2	2,825.6	2,884.6	3,100.1	3,231.9	4,118.9	4,648.4	5,459.3	7,300.4	8,747.9	9,831.6
Departments											
Department of Agriculture	56.9	54.8	54.9	68.9	82.7	95.5	108.9	117.7	120.6	141.3	151.2
Department of Commerce[a]	8.9	12.2	8.0	8.9	20.2	18.2	17.5	28.4	29.7	32.0	38.1
Department of Defense, Total	1,167.0	2,299.2	2,342.0	2,519.7	2,519.0	3,193.3	3,528.4	4,094.4	5,553.0	6,501.4	6,720.0
Department of the Army[b]	283.0	712.2	785.2	985.2	682.4	766.9	856.5	878.3	1,066.2	1,253.8	1,226.4
Department of the Navy[b]	461.0	642.0	634.7	581.3	625.8	767.3	820.2	1,003.1	1,277.0	1,604.5	1,537.5
Department of the Air Force[b]	423.0	945.0	922.1	909.9	1,188.9	1,634.7	1,809.1	2,092.7	2,958.2	3,420.6	3,632.9
Advanced Research Project Agency[c]	-------	-------	-------	-------	-------	-------	3.0	78.0	211.7	188.7	181.5
Departmentwide Funds[c]	-------	-------	-------	43.3	21.9	24.4	39.6	42.3	40.0	33.9	141.7
Defense Agencies[c]	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Department of Health, Education, and Welfare	47.9	47.7	53.3	66.0	83.4	137.0	166.8	227.2	291.8	343.5	476.0
Department of the Interior	29.8	31.9	36.0	31.4	35.2	42.2	48.7	69.1	63.1	71.2	80.3
Department of Transportation[a]	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Other Agencies											
Atomic Energy Commission	168.8	309.9	323.4	327.3	410.8	528.0	644.0	699.8	761.7	850.2	1,029.2
Environmental Protection Agency	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Federal Aviation Agency	-------	-------	-------	-------	-------	-------	4.2	24.1	38.2	48.4	46.2
National Aeronautics and Space Administration[d]	50.9	49.5	47.5	43.4	50.5	55.2	72.0	120.7	346.6	646.1	1,142.7
National Science Foundation	.5	2.1	3.6	8.3	13.9	27.0	29.4	45.3	57.6	71.3	92.1
Office of Economic Opportunity	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Veterans Administration	3.3	4.6	5.1	5.3	6.1	7.3	10.0	12.9	14.6	22.1	27.4
All Other Agencies	14.2	13.8	10.9	21.0	10.3	15.2	18.6	19.7	23.5	20.4	28.4

Agency	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total, all agencies	11,338.5	13,758.9	13,811.4	14,970.2	16,073.0	16,333.0	15,695.4	15,157.0	15,379.7	16,093.6	16,632.4
Departments											
Department of Agriculture	164.1	178.4	199.6	228.4	253.5	262.5	270.1	285.0	311.3	346.4	355.7
Department of Commerce[a]	48.4	53.4	58.1	52.6	68.7	75.4	75.1	122.9	118.2	150.1	193.2
Department of Defense, Total	6,793.7	7,432.9	6,627.8	6,680.1	7,606.5	7,990.1	7,660.5	7,447.1	7,561.5	8,128.5	8,260.9
Department of the Army[b]	1,406.2	1,394.8	1,408.7	1,473.1	1,709.4	1,495.5	1,577.3	1,753.5	1,637.9	2,010.0	2,023.2
Department of the Navy[b]	1,564.8	1,715.1	1,396.9	1,532.6	1,928.9	2,052.9	2,080.0	2,150.8	2,449.4	2,503.9	2,512.8
Department of the Air Force[b]	3,508.7	3,917.9	3,359.8	3,171.6	3,453.0	3,927.2	3,513.8	3,088.5	2,975.9	3,154.0	3,215.2
Advanced Research Project Agency[c]	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Departmentwide Funds[c]	14.6	21.1	9.9	9.9	9.9	7.2	9.2	5.9	4.5	18.5	46.2
Defense Agencies[c]	299.4	384.0	452.4	492.9	505.4	507.3	480.0	448.4	493.8	442.1	463.5
Department of Health, Education, and Welfare	590.1	746.9	681.4	830.9	993.5	1,216.5	1,186.7	1,217.9	1,282.5	1,462.7	1,700.5
Department of the Interior	95.5	92.3	108.7	131.3	147.1	178.2	195.8	151.6	178.1	213.9	241.0
Department of Transportation[a]	-------	-------	-------	157.7	230.5	212.3	203.2	258.9	468.2	369.6	295.6
Other Agencies											
Atomic Energy Commission	1,077.9	1,236.0	1,240.7	1,212.4	1,257.3	1,369.0	1,405.9	1,346.0	1,302.9	1,307.8	1,374.6
Environmental Protection Agency	-------	-------	-------	-------	-------	-------	-------	68.1	100.6	156.7	174.2
Federal Aviation Agency	66.5	62.7	94.0	-------	-------	-------	-------	-------	-------	-------	-------
National Aeronautics and Space Administration[d]	2,327.0	3,733.2	4,562.0	5,360.6	5,137.1	4,597.6	4,186.4	3,696.5	3,337.8	3,137.9	3,132.4
National Science Foundation	110.6	153.8	149.7	175.7	224.3	266.7	280.0	292.9	334.7	409.2	455.3
Office of Economic Opportunity	-------	-------	4.2	49.4	36.7	41.0	77.1	79.3	148.7	124.0	113.5
Veterans Administration	29.9	32.3	36.6	38.4	41.3	44.1	49.8	58.0	60.8	65.9	73.0
All Other Agencies	34.8	37.0	48.6	52.7	76.5	79.6	104.8	132.8	174.4	220.9	262.5

[a] The Department of Transportation, as of 1966, includes the Bureau of Public Roads and the Office of Transportation Research and Development formerly in the Department of Commerce; the Federal Aviation Agency; and the U.S. Coast Guard formerly under the Treasury Department.

[b] Includes pay and allowances of military R&D personnel beginning in fiscal year 1953, and support from procurement appropriations of development, test, and evaluation, starting with fiscal year 1954.

[c] Starting with 1963, Defense Agencies include the Advanced Research Projects Agency (ARPA) and other agencies such as Defense Atomic Support Agency and Defense Communications Agency. With the exception of ARPA, these agencies were previously included in departmentwide funds.

Starting with 1963, Departmentwide Funds include Military Assistance, Civil Defense, and Emergency funds only.

[d] National Advisory Committee for Aeronautics prior to fiscal year 1958

Table C-94. Federal expenditures for R&D plant, by agency, fiscal years 1952-73

[Millions of dollars]

Agency	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Total, all agencies	268.0	275.4	263.3	208.2	214.1	342.9	342.2	347.1	443.8	539.1	555.2
Departments											
Department of Agriculture	.2	.2	.5	3.2	5.0	1.5	2.9	7.0	10.8	6.4	4.5
Department of Commerce[a]	1.2	1.4	2.6	1.0	.2	1.6	.3	1.7	3.4	3.4	9.5
Department of Defense, Total	150.0	155.6	145.2	110.5	120.0	178.1	135.8	88.9	100.7	116.7	92.0
Department of the Army[b]	35.0	31.1	30.5	27.6	20.0	15.2	17.0	12.6	42.7	52.3	17.1
Department of the Navy[b]	15.0	36.3	30.0	10.6	10.0	17.6	33.9	31.6	23.6	26.5	23.5
Department of the Air Force[b]	100.0	88.2	84.7	72.3	90.0	145.3	84.9	41.8	19.8	20.0	40.0
Advanced Research Project Agency[c]	......	......	......	......	......	......	......	2.9	14.6	17.9	11.4
Departmentwide Funds[c]	......	......	......	......	......	......	......	......	......	......	......
Defense Agencies[c]	......	......	......	......	......	......	......	......	......	......	......
Department of Health, Education, and Welfare	16.2	17.5	9.2	4.2	2.8	6.5	13.6	25.6	32.4	30.6	36.0
Department of the Interior	3.0	3.3	3.1	.5	.5	.1	.2	3.1	2.2	3.9	6.4
Department of Transportation[a]	......	......	......	......	......	......	......	......	......	......	......
Other Agencies											
Atomic Energy Commission	80.8	68.2	59.7	58.1	63.2	128.5	160.2	177.3	224.2	260.9	255.2
Environmental Protection Agency	......	......	......	......	......	......	......	......	......	......	......
Federal Aviation Agency	......	......	......	......	......	......	......	3.5	3.0	4.5	7.5
National Aeronautics and Space Administration[d]	16.5	29.1	42.0	30.4	20.6	20.8	17.2	24.8	54.4	98.2	114.3
National Science Foundation	......	......	......	.3	1.6	3.6	4.3	8.8	6.6	11.4	20.6
Veterans Administration	......	......	......	......	......	2.1	2.7	4.0	4.0	1.0	3.4
All Other Agencies	.1	.1	.9	.1	.1	.1	5.0	2.4	2.1	2.1	5.8

Agency	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total, all agencies	673.6	948.1	1,077.4	1,047.8	786.1	715.9	652.2	578.9	612.7	640.3	694.5
Departments											
Department of Agriculture	8.4	5.0	6.1	7.9	16.2	23.7	13.7	13.6	7.6	14.3	5.0
Department of Commerce[a]	21.9	31.1	27.7	18.7	11.8	6.2	3.3	5.1	4.7	7.3	9.9
Department of Defense, Total	55.2	84.1	99.9	54.5	73.5	173.5	207.9	140.8	144.5	157.6	180.6
Department of the Army[b]	15.0	18.8	20.2	12.1	24.6	43.9	32.5	18.2	32.7	38.1	45.0
Department of the Navy[b]	8.8	9.1	22.5	16.0	13.0	51.2	28.8	21.6	28.4	44.1	49.7
Department of the Air Force[b]	30.4	33.2	45.0	22.6	34.1	60.6	112.5	61.5	49.7	43.8	56.4
Advanced Research Project Agency[c]	......	......	......	......	......	......	......	......	......	......	......
Departmentwide Funds[c]	......	......	......	......	......	......	......	......	......	......	......
Defense Agencies[c]	1.0	23.0	12.2	3.8	1.8	17.7	34.2	39.6	33.7	31.7	29.6
Department of Health, Education, and Welfare	42.2	46.6	56.6	48.6	81.6	66.6	33.3	43.3	44.3	57.2	60.4
Department of the Interior	7.2	9.7	10.1	18.0	19.7	16.9	8.4	8.3	7.0	11.8	26.7
Department of Transportation[a]	......	......	......	7.9	8.7	6.8	4.8	3.7	9.6	27.6	38.7
Other Agencies											
Atomic Energy Commission	257.7	269.1	279.4	249.5	209.6	225.3	248.1	270.0	302.0	272.2	244.8
Environmental Protection Agency	......	......	......	......	......	......	......	2.1	.4	1.0	6.6
Federal Aviation Agency	8.2	11.2	2.4	......	......	......	......	......	......	......	......
National Aeronautics and Space Administration[d]	225.3	437.8	530.9	572.4	288.6	126.1	65.3	56.6	44.1	43.1	60.0
National Science Foundation	42.5	49.1	56.6	65.2	70.5	66.9	62.3	31.2	39.2	31.1	34.6
Veterans Administration	3.2	1.7	3.8	3.7	5.1	3.3	4.2	3.7	7.0	11.7	8.8
All Other Agencies	1.8	2.7	3.9	1.4	.8	.6	.9	.5	2.3	5.4	18.4

---

[a] The Department of Transportation, as of 1966, includes the Bureau of Public Roads and the Office of Transportation Research and Development formerly in the Department of Commerce; the Federal Aviation Agency; and the U.S. Coast Guard formerly under the Treasury Department.

[b] Includes pay and allowances of military R&D personnel beginning in fiscal year 1953, and support from procurement appropriations of development, test, and evaluation, starting with fiscal year 1954.

[c] Starting with 1963, Defense Agencies include the Advanced Research Projects Agency (ARPA) and other agencies such as Defense Atomic Support Agency and Defense Communications Agency. With the exception of ARPA, these agencies were previously included in departmentwide funds. Starting with 1963, Departmentwide Funds include Military Assistance, Civil Defense, and Emergency Funds only.

[d] National Advisory Committee for Aeronautics prior to fiscal year 1958.

Table C-95. Federal obligations for research, development, and R&D plant, by agency, fiscal years 1947-73

[Millions of dollars]

Agency	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Total, all agencies	690.9	867.6	1,105.1	1,175.3	1,811.9	2,194.5	3,361.4	3,039.0	2,744.7	3,266.9	4,389.2	4,906.0	7,122.6
Departments													
Department of Agriculture	40.2	46.4	53.9	57.7	55.2	55.7	56.6	67.2	73.3	83.6	102.8	113.0	138.6
Department of Commerce[a]	6.4	9.8	11.9	22.7	12.3	14.1	11.2	8.3	15.9	18.4	19.3	18.6	30.1
Department of Defense, Total	503.3	485.8	651.9	635.6	1,278.0	1,706.6	2,732.8	2,416.4	2,084.2	2,430.6	3,250.0	3,480.3	5,236.8
Department of the Army[b]	112.4	97.7	119.2	120.9	317.1	535.9	930.7	796.2	443.5	420.0	544.5	615.3	1,186.8
Department of the Navy[b]	269.2	247.3	313.9	272.9	489.6	608.1	697.0	625.4	573.3	713.3	856.7	887.9	1,381.1
Department of the Air Force[b]	121.7	140.8	218.8	241.8	471.3	562.6	1,105.1	994.8	1,045.7	1,252.8	1,811.9	1,903.6	2,461.4
Advanced Research Projects Agency[c]	......	......	......	......	......	......	......	......	......	......	......	15.5	171.8
Departmentwide Funds[c]	......	......	......	......	......	......	......	......	21.7	44.5	36.9	58.0	35.6
Defense Agencies[c]	......	......	......	......	......	......	......	......	......	......	......	......	......
Department of Health, Education, and Welfare[d]	18.8	27.1	39.9	65.3	53.0	52.0	58.7	62.0	70.9	88.9	177.9	217.9	278.7
Department of the Interior	16.9	28.0	35.6	31.4	32.2	36.0	34.4	38.7	32.6	36.6	45.3	51.9	63.7
Department of Transportation[a]	......	......	......	......	......	......	......	......	......	......	......	......	......
Other Agencies													
Atomic Energy Commission	64.6	212.5	246.9	284.2	278.5	228.9	363.3	367.9	372.9	505.1	644.6	828.6	925.2
Environmental Protection Agency	......	......	......	......	......	......	......	......	......	......	......	......	......
Federal Aviation Agency	......	......	......	......	......	......	......	......	......	......	......	18.4	35.1
National Aeronautics and Space Administration[e]	29.9	44.4	50.4	62.7	84.4	81.7	78.6	56.9	64.5	65.7	83.4	97.3	299.7
National Science Foundation	......	......	......	......	.1	.9	2.3	4.6	10.3	17.4	37.8	41.5	75.2
Office of Economic Opportunity	......	......	......	......	......	......	......	......	......	......	......	......	......
Veterans Administration	1.4	3.1	4.3	3.8	5.1	3.9	5.1	5.3	5.6	6.5	10.1	12.6	17.1
All Other Agencies	9.4	10.5	10.3	11.9	13.1	14.7	18.4	11.6	14.6	14.1	18.1	26.0	22.5

Agency	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
													1972	1973
Total, all agencies	8,080.0	9,607.1	11,069.1	13,663.0	15,323.9	15,745.9	16,178.8	17,149.4	16,525.3	16,306.2	15,854.3	16,160.8	17,485.3	18,626.8
Departments														
Department of Agriculture	129.1	145.6	166.1	174.8	191.4	233.7	256.7	260.9	271.9	270.8	286.4	310.0	359.6	362.7
Department of Commerce[a]	33.4	46.8	70.9	80.9	98.6	63.5	66.4	78.9	88.1	75.3	125.5	152.9	181.0	245.0
Department of Defense, Total	5,825.3	6,687.9	6,816.5	7,372.8	7,352.5	6,865.0	7,099.0	8,135.9	7,907.7	7,890.0	7,500.9	7,662.7	8,550.1	8,973.3
Department of the Army[b]	1,182.8	1,153.5	1,224.6	1,311.6	1,389.3	1,478.3	1,615.0	1,703.3	1,593.9	1,666.5	1,687.0	1,726.0	2,149.1	2,185.3
Department of the Navy[b]	1,557.4	1,564.6	1,556.6	1,609.5	1,640.0	1,462.2	1,613.3	2,122.5	2,078.4	2,159.7	2,276.1	2,311.7	2,598.4	2,822.6
Department of the Air Force[b]	2,833.5	3,622.2	3,619.8	3,988.9	3,822.6	3,382.0	3,373.3	3,819.9	3,724.5	3,604.2	3,049.1	3,163.2	3,246.1	3,399.1
Advanced Research Projects Agency[c]	212.4	222.4	209.1	......	......	......	......	......	......	......	......	......	......	......
Departmentwide Funds[c]	39.2	125.2	206.5	11.1	11.8	11.3	10.0	10.6	7.3	5.0	4.1	3.0	53.7	53.5
Defense Agencies[c]	......	......	......	451.7	488.8	531.2	487.5	479.5	503.5	454.6	484.6	458.8	502.8	512.9

Department of Health, Education, and Welfare[d]	18.8	27.1	39.9	65.3	53.0	52.0	58.7	62.0	70.9	88.9	177.9	217.9	278.7
Department of the Interior	16.9	28.0	35.6	31.4	32.2	36.0	34.4	38.7	32.6	36.6	45.3	51.9	63.7
Department of Transportation[a]	....	....	....	....	....	....	....	....	....	....	....	....	....
Other Agencies													
Atomic Energy Commission	64.6	212.5	246.9	284.2	278.5	228.9	363.3	367.9	372.9	505.1	644.6	828.6	925.2
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	....	....	....
Federal Aviation Agency	....	....	....	....	....	....	....	....	....	....	....	18.4	35.1
National Aeronautics and Space Administration[e]	29.9	44.4	50.4	62.7	84.4	81.7	78.6	56.9	64.5	65.7	83.4	97.3	299.7
National Science Foundation	....	....	....	....	.1	.9	2.3	4.6	10.3	17.4	37.8	41.5	75.2
Office of Economic Opportunity	....	....	....	....	....	....	....	....	....	....	....	....	....
Veterans Administration	1.4	3.1	4.3	3.8	5.1	3.9	5.1	5.3	5.6	6.5	10.1	12.6	17.1
All Other Agencies	9.4	10.5	10.3	11.9	13.1	14.7	18.4	11.6	14.6	14.1	18.1	26.0	22.5

Agency	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
													1972	1973
Total, all agencies	8,080.0	9,607.1	11,069.1	13,663.0	15,323.9	15,745.9	16,178.8	17,149.4	16,525.3	16,306.2	15,854.3	16,160.8	17,485.3	18,626.8
Departments														
Department of Agriculture	129.1	145.6	166.1	174.8	191.4	233.7	256.7	260.9	271.9	270.8	286.4	310.0	359.6	362.7
Department of Commerce[a]	33.4	46.8	70.9	80.9	98.6	63.5	66.4	78.9	88.1	75.3	125.5	152.9	181.0	245.0
Department of Defense, Total	5,825.3	6,687.9	6,816.5	7,372.8	7,352.5	6,865.0	7,099.0	8,135.9	7,907.7	7,890.0	7,500.9	7,662.7	8,550.1	8,973.3
Department of the Army[b]	1,182.8	1,153.5	1,224.6	1,311.6	1,389.3	1,478.3	1,615.0	1,703.3	1,593.9	1,666.5	1,687.0	1,726.0	2,149.1	2,185.3
Department of the Navy[b]	1,557.4	1,564.6	1,556.6	1,609.5	1,640.0	1,462.2	1,613.3	2,122.5	2,078.4	2,159.7	2,276.1	2,311.7	2,598.4	2,822.6
Department of the Air Force[b]	2,833.5	3,622.2	3,619.8	3,988.9	3,822.6	3,382.0	3,373.3	3,819.9	3,724.5	3,604.2	3,049.1	3,163.2	3,246.1	3,399.1
Advanced Research Projects Agency[c]	212.4	222.4	209.1	....	....	....	....	....	....	....	....	....	....	....
Departmentwide Funds[c]	39.2	125.2	206.5	11.1	11.8	11.3	10.0	10.6	7.3	5.0	4.1	3.0	53.7	53.5
Defense Agencies[c]	....	....	....	451.7	488.8	531.2	487.5	479.5	503.5	454.6	484.6	458.8	502.8	512.9
Department of Health, Education, and Welfare[d]	358.6	466.2	617.4	715.9	847.7	970.5	1,142.7	1,207.2	1,298.5	1,350.2	1,252.2	1,493.4	1,809.9	2,026.1
Department of the Interior	66.7	79.1	89.4	105.9	114.3	127.4	162.6	202.7	217.5	221.8	168.5	202.2	239.8	277.7
Department of Transportation[a]	....	....	....	....	....	....	181.5	292.6	179.8	233.6	322.8	493.3	396.1	441.8
Other Agencies														
Atomic Energy Commission	988.2	1,063.5	1,316.0	1,398.6	1,478.6	1,539.7	1,441.6	1,484.9	1,534.3	1,708.5	1,611.9	1,615.2	1,590.9	1,660.4
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	90.5	137.8	178.6	221.7
Federal Aviation Agency	52.9	52.8	74.6	90.6	73.7	71.7	....	....	....	....	....	....	....	....
National Aeronautics and Space Administration[e]	496.9	905.1	1,684.2	3,434.1	4,842.2	5,481.9	5,327.4	4,987.8	4,494.4	4,018.1	3,833.4	3,298.2	3,260.7	3,352.3
National Science Foundation	87.6	106.3	169.6	218.3	238.0	275.4	323.1	327.9	350.3	300.7	312.3	364.8	480.7	563.6
Office of Economic Opportunity	....	....	....	....	....	14.9	64.0	44.2	44.1	70.6	123.4	153.1	118.9	112.5
Veterans Administration	19.1	23.2	30.8	33.1	34.3	47.3	46.0	45.9	48.0	54.3	61.2	77.9	70.1	86.6
All Other Agencies	32.2	30.4	33.6	37.9	52.6	55.1	67.8	80.5	90.7	112.3	165.3	199.3	248.9	303.1

[a] The Department of Transportation, as of 1966, includes the Bureau of Public Roads and the Office of Transportation Research and Development formerly in the Department of Commerce; the Federal Aviation Agency; and the U.S. Coast Guard formerly under the Treasury Department.

[b] Includes pay and allowances of military R&D personnel beginning in fiscal year 1953, and support from procurement appropriations of development, test, and evaluation, starting with fiscal year 1954.

[c] Starting with 1963, Defense Agencies include the Advanced Research Projects Agency (ARPA), and other agencies such as Defense Atomic Support Agency and Defense Communications Agency. With the exception of ARPA, these agencies were previously included in departmentwide funds.

Starting with 1963, Departmentwide Funds include Military Assistance, Civil Defense, and Emergency Funds only.

[d] Federal Security Agency prior to fiscal year 1952.

[e] National Advisory Committee for Aeronautics prior to fiscal year 1958.

SOURCES: National Science Foundation and the Bureau of the Budget (prior to 1952)

Table C-96. Federal obligations for research and development, by agency, fiscal years 1947-73

[Millions of dollars]

Agency	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Total, all agencies	619.5	776.5	937.7	972.6	1,481.9	1,887.3	3,106.0	2,875.0	2,532.8	2,988.2	3,932.0	4,569.7	6,693.5
Departments													
Department of Agriculture	40.0	45.7	53.2	56.9	55.1	55.3	56.0	59.3	72.2	83.0	99.8	110.2	120.7
Department of Commerce[a]	5.7	8.9	10.9	22.4	11.0	10.3	10.9	7.8	15.0	18.2	17.7	18.3	25.6
Department of Defense, Total	469.3	485.3	626.1	599.7	1,125.9	1,508.5	2,577.2	2,320.0	1,945.1	2,268.6	2,985.6	3,403.3	5,161.6
Department of the Army[b]	104.3	97.7	114.7	119.0	307.1	458.8	899.6	763.3	419.3	408.0	500.6	603.3	1,174.2
Department of the Navy[b]	252.3	247.3	298.0	257.6	450.2	551.1	660.7	615.3	564.8	673.3	804.2	867.9	1,349.5
Department of the Air Force[b]	112.7	140.8	213.5	223.1	368.6	498.6	1,016.9	941.4	939.3	1,142.8	1,643.9	1,858.6	2,440.0
Advanced Research Projects Agency[c]	....	....	....	....	....	....	....	....	....	....	....	15.5	162.3
Departmentwide Funds[c]	....	....	....	....	....	....	....	....	21.7	44.5	36.9	58.0	35.6
Defense Agencies[c]	....	....	....	....	....	....	....	....	....	....	....	....	....
Department of Health, Education, and Welfare[d]	10.6	24.3	25.2	34.2	37.9	43.6	49.9	58.2	68.0	86.0	144.2	184.9	242.8
Department of the Interior	16.9	20.3	30.2	28.7	30.4	30.7	32.1	37.7	32.4	36.1	45.2	51.1	60.6
Department of Transportation[a]	....	....	....	....	....	....	....	....	....	....	....	....	....
Other Agencies													
Atomic Energy Commission	39.9	145.4	140.0	172.2	157.9	168.9	309.9	323.4	327.3	410.7	528.0	644.0	699.8
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	....	....	....
Federal Aviation Agency[a]	....	....	....	....	....	....	....	....	....	....	....	16.3	27.3
National Aeronautics and Space Administration[e]	26.7	33.0	38.3	42.8	45.4	50.5	48.4	47.3	43.0	49.5	55.3	77.1	261.7
National Science Foundation	....	....	....	....	.1	.9	2.3	4.6	9.7	16.0	30.6	33.6	60.4
Office of Economic Opportunity	....	....	....	....	....	....	....	....	....	....	....	....	....
Veterans Administration	1.4	3.1	4.3	3.8	5.1	3.9	5.1	5.3	5.6	6.5	7.7	10.1	12.8
All Other Agencies	8.9	10.0	9.6	11.8	13.0	14.7	14.1	11.3	14.5	13.6	17.9	21.0	20.2

Agency	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
													1972	1973
Total, all agencies	7,551.7	9,058.6	10,289.9	12,494.7	14,225.4	14,614.3	15,320.4	16,529.3	15,921.4	15,637.2	15,329.8	15,549.5	16,820.9	17,790.8
Departments														
Department of Agriculture	125.8	143.4	157.2	168.0	189.0	224.6	234.9	252.6	253.5	260.1	281.2	304.9	348.5	361.4
Department of Commerce[a]	31.4	32.3	40.1	52.2	53.8	61.3	55.2	74.8	83.9	72.1	121.6	143.7	173.3	228.3
Department of Defense, Total	5,711.5	6,574.0	6,722.9	7,285.7	7,261.9	6,796.5	7,023.6	8.049.2	7,709.3	7,696.3	7,360.4	7,509.0	8,374.1	8,773.8
Department of the Army[b]	1,117.0	1,117.9	1,203.5	1,297.4	1,376.9	1,459.5	1,585.4	1,661.3	1,563.4	1,643.8	1,659.8	1,682.4	2,101.8	2,135.5
Department of the Navy[b]	1,535.5	1,539.0	1,539.1	1,597.3	1,621.2	1,449.5	1,601.7	2,108.9	2,024.8	2,124.2	2,257.9	2,283.7	2,550.0	2,752.9
Department of the Air Force[b]	2,815.5	3,588.9	3,569.8	3,944.7	3,784.0	3,351.0	3,342.3	3,794.3	3,621.7	3,498.5	2,990.0	3,113.5	3,195.5	3,343.6
Advanced Research Projects Agency[c]	204.4	203.1	204.1	....	....	....	....	....	....	....	....	....	....	....
Departmentwide Funds[c]	39.2	125.2	206.5	11.1	11.8	11.3	10.0	10.6	7.3	5.0	4.1	3.0	53.7	53.5
Defense Agencies[c]	....	....	....	435.2	467.9	525.2	484.2	474.0	492.0	424.6	448.6	426.5	473.1	488.3
Department of Health, Education,														

Department of Health, Education, and Welfare[d]	10.6	24.3	25.2	34.2	37.9	43.6	49.9	58.2	68.0	86.0	144.2	184.9	242.8
Department of the Interior	16.9	20.3	30.2	28.7	30.4	30.7	32.1	37.7	32.4	36.1	45.2	51.1	60.6
Department of Transportation[a]	......	......	......	......	......	......	......	......	......	......	......	......	......
Other Agencies													
Atomic Energy Commission	39.9	145.4	140.0	172.2	157.9	168.9	309.9	323.4	327.3	410.7	528.0	644.0	699.8
Environmental Protection Agency	......	......	......	......	......	......	......	......	......	......	......	......	......
Federal Aviation Agency[a]	......	......	......	......	......	......	......	......	......	......	......	16.3	27.3
National Aeronautics and Space Administration[e]	26.7	33.0	38.3	42.8	45.4	50.5	48.4	47.3	43.0	49.5	55.3	77.1	261.7
National Science Foundation	......	......	......	......	.1	.9	2.3	4.6	9.7	16.0	30.6	33.6	60.4
Office of Economic Opportunity	......	......	......	......	......	......	......	......	......	......	......	......	......
Veterans Administration	1.4	3.1	4.3	3.8	5.1	3.9	5.1	5.3	5.6	6.5	7.7	10.1	12.8
All Other Agencies	8.9	10.0	9.6	11.8	13.0	14.7	14.1	11.3	14.5	13.6	17.9	21.0	20.2

Agency	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
													1972	1973
Total, all agencies	7,551.7	9,058.6	10,289.9	12,494.7	14,225.4	14,614.3	15,320.4	16,529.3	15,921.4	15,637.2	15,329.8	15,549.5	16,820.9	17,790.8
Departments														
Department of Agriculture	125.8	143.4	157.2	168.0	189.0	224.6	234.9	252.6	253.5	260.1	281.2	304.9	348.5	361.4
Department of Commerce[a]	31.4	32.3	40.1	52.2	53.8	61.3	55.2	74.8	83.9	72.1	121.6	143.7	173.3	228.3
Department of Defense, Total	5,711.5	6,574.0	6,722.9	7,285.7	7,261.9	6,796.5	7,023.6	8.049.2	7,709.3	7,696.3	7,360.4	7,509.0	8,374.1	8,773.8
Department of the Army[b]	1,117.0	1,117.9	1,203.5	1,297.4	1,376.9	1,459.5	1,585.4	1,661.3	1,563.4	1,643.8	1,659.8	1,682.4	2,101.8	2,135.5
Department of the Navy[b]	1,535.5	1,539.0	1,539.1	1,597.3	1,621.2	1,449.5	1,601.7	2,108.9	2,024.8	2,124.2	2,257.9	2,283.7	2,550.0	2,752.9
Department of the Air Force[b]	2,815.5	3,588.9	3,569.8	3,944.7	3,784.0	3,351.0	3,342.3	3,794.3	3,621.7	3,498.5	2,990.0	3,113.5	3,195.5	3,343.6
Advanced Research Projects Agency[c]	204.4	203.1	204.1	......	......	......	......	......	......	......	......	......	......	......
Departmentwide Funds[c]	39.2	125.2	206.5	11.1	11.8	11.3	10.0	10.6	7.3	5.0	4.1	3.0	53.7	53.5
Defense Agencies[c]	......	......	......	435.2	467.9	525.2	484.2	474.0	492.0	424.6	448.6	426.5	473.1	488.3
Department of Health, Education, and Welfare[d]	319.8	428.5	576.9	656.2	776.9	869.4	1,014.4	1,146.6	1,251.8	1,297.4	1,221.0	1,476.1	1,763.5	1,957.2
Department of the Interior	64.0	73.3	85.6	92.1	106.4	113.2	143.2	170.4	190.6	207.6	157.9	193.7	224.0	256.0
Department of Transportation[a]	......	......	......	......	......	......	171.7	283.6	171.7	228.0	317.3	482.5	364.5	381.0
Other Agencies														
Atomic Energy Commission	761.7	850.2	1,029.2	1,077.9	1,236.0	1,240.7	1,212.4	1,257.3	1,369.0	1,405.9	1,346.0	1,302.9	1,307.8	1,374.6
Environmental Protection Agency	......	......	......	......	......	......	......	......	......	......	88.5	136.7	175.8	185.6
Federal Aviation Agency[a]	47.9	48.2	66.2	83.5	62.8	64.4	......	......	......	......	......	......	......	......
National Aeronautics and Space Administration[e]	369.3	776.9	1,439.2	2,857.4	4,286.6	4,951.5	5,050.0	4,867.0	4,429.4	3,963.3	3,799.9	3,257.9	3,208.0	3,215.0
National Science Foundation	74.7	84.0	113.9	154.1	170.2	187.2	243.7	262.4	283.5	273.8	289.0	336.9	451.1	525.6
Office of Economic Opportunity	......	......	......	......	......	14.9	64.0	44.2	44.1	70.6	123.4	153.1	118.9	112.5
Veterans Administration	15.1	22.0	27.5	29.9	33.7	37.4	40.1	40.9	44.7	50.2	58.6	62.9	68.0	75.5
All Other Agencies	30.6	25.7	31.2	37.6	48.0	53.4	67.3	80.2	89.9	111.9	165.0	189.2	243.4	284.3

[a] The Department of Transportation, as of 1966, includes the Bureau of Public Roads and the Office of Transportation Research and Development formerly in the Department of Commerce; the Federal Aviation Agency; and the U.S. Coast Guard formerly under the Treasury Department.

[b] Includes pay and allowances of military R&D personnel beginning in fiscal year 1953, and support from procurement appropriations of development, test, and evaluation, starting with fiscal year 1954.

[c] Starting with 1963, Defense Agencies include the Advanced Research Projects Agency (ARPA), and other agencies such as Defense Atomic Support Agency and Defense Communications Agency. With the exception of ARPA, these agencies were previously included in departmentwide fund

Starting with 1963, Departmentwide Funds include Military Assistance, Civil Defense, and Eme gency Funds only.

[d] Federal Security Agency prior to fiscal year 1952.

[e] National Advisory Committee for Aeronautics prior to fiscal year 1958.

SOURCES: National Science Foundation and the Bureau of the Budget (prior to 1952).

Table C-97. Federal obligations for R&D plant, by agency, fiscal years 1947-73

[Millions of dollars]

Agency	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Total, all agencies	71.4	91.1	167.4	202.7	330.0	307.2	255.4	164.0	211.9	278.7	457.2	336.3	429.1
Departments													
Department of Agriculture	.2	.7	.7	.8	.1	.4	.6	7.9	1.1	.6	3.0	2.8	17.9
Department of Commerce[a]	.7	.9	1.0	.3	1.3	3.8	.3	.5	.9	.2	1.6	.4	4.5
Department of Defense, Total	34.0	....	25.8	35.9	152.1	198.1	155.6	96.4	139.1	162.0	264.4	77.0	75.1
Department of the Army	8.1	....	4.5	1.9	10.0	77.1	31.1	32.9	24.2	12.0	43.9	12.0	12.6
Department of the Navy	16.9	....	15.9	15.3	39.4	57.0	36.3	10.1	8.5	40.0	52.5	20.0	31.6
Department of the Air Force	9.0	....	5.3	18.7	102.7	64.0	88.2	53.4	106.4	110.0	168.0	45.0	21.4
Advanced Research Projects Agency[b]	....	....	....	....	....	....	....	....	....	....	....	....	9.5
Defense Agencies[b]	....	....	....	....	....	....	....	....	....	....	....	....	....
Department of Health, Education, and Welfare[c]	8.2	2.8	14.7	31.1	15.1	8.4	8.8	3.8	2.8	3.0	33.7	33.0	35.9
Department of the Interior	....	7.7	5.4	2.7	1.8	5.2	2.3	1.0	.1	.5	.1	.6	3.1
Department of Transportation[a]	....	....	....	....	....	....	....	....	....	....	....	....	....
Other Agencies													
Atomic Energy Commission	24.7	67.1	106.9	112.0	120.6	60.0	53.4	44.5	45.6	94.3	116.6	184.6	225.4
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	....	....	....
Federal Aviation Agency[a]	....	....	....	....	....	....	....	....	....	....	....	2.1	7.8
National Aeronautics and Space Administration[d]	3.2	11.4	12.1	19.9	39.0	31.2	30.2	9.6	21.5	16.2	28.1	20.3	38.0
National Science Foundation	....	....	....	....	....	....	....	....	.7	1.4	7.1	7.9	14.8
Veterans Administration	....	....	....	....	....	....	....	....	....	....	2.4	2.6	4.3
All Other Agencies	.5	.5	.8	.1	.1	....	4.3	.3	.1	.5	.2	5.0	2.3

Agency	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
													1972	1973
Total, all agencies	528.3	548.5	779.1	1,168.3	1,098.5	1,131.6	858.3	620.1	603.8	669.0	524.4	611.2	664.4	836.0
Departments														
Department of Agriculture	3.4	2.2	9.0	6.8	2.4	9.1	21.8	8.2	18.3	10.7	5.3	5.1	11.1	1.3
Department of Commerce[a]	2.0	14.5	30.8	28.7	44.8	2.2	11.2	4.1	4.2	3.2	3.9	9.2	7.7	16.7
Department of Defense, Total	113.7	113.9	93.6	87.2	90.6	68.5	75.4	86.7	198.3	193.8	140.6	153.7	176.0	199.5
Department of the Army	65.8	35.6	21.1	14.2	12.3	18.8	29.6	42.0	30.5	22.7	27.2	43.6	47.4	49.7
Department of the Navy	21.9	25.6	17.5	12.3	18.8	12.7	11.6	13.6	53.6	35.5	18.2	28.0	48.4	69.7
Department of the Air Force	18.0	33.3	50.0	44.2	38.6	31.0	30.9	25.6	102.8	105.6	59.2	49.7	50.6	55.5
Advanced Research Projects Agency[b]	8.0	19.3	5.1	....	....	....	....	....	....	....	....	....	....	....
Defense Agencies[b]	....	....	....	16.5	20.9	6.0	3.3	5.5	11.5	30.0	36.0	32.3	29.7	24.6
Department of Health, Education														

Department of Health, Education, and Welfare[c]	8.2	2.8	14.7	31.1	15.1	8.4	8.8	3.8	2.8	3.0	33.7	33.0	35.9
Department of the Interior	....	7.7	5.4	2.7	1.8	5.2	2.3	1.0	.1	.5	.1	.8	3.1
Department of Transportation[a]	....	....	....	....	....	....	....	....	....	....	....	....	....
Other Agencies													
Atomic Energy Commission	24.7	67.1	106.9	112.0	120.6	60.0	53.4	44.5	45.6	94.3	116.6	184.6	225.4
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	....	....	....
Federal Aviation Agency[a]	....	....	....	....	....	....	....	....	....	....	....	2.1	7.8
National Aeronautics and Space Administration[d]	3.2	11.4	12.1	19.9	39.0	31.2	30.2	9.6	21.5	16.2	28.1	20.3	38.0
National Science Foundation	....	....	....	....	....	....	....	....	.7	1.4	7.1	7.9	14.8
Veterans Administration	....	....	....	....	....	....	....	....	....	....	2.4	2.6	4.3
All Other Agencies	.5	.5	.7	.1	.1	....	4.3	.3	.1	.5	.2	5.0	2.3

Agency	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
													1972	1973
Total, all agencies	528.3	548.5	779.1	1,168.3	1,098.5	1,131.6	858.3	620.1	603.8	669.0	524.4	611.2	664.4	836.0
Departments														
Department of Agriculture	3.4	2.2	9.0	6.8	2.4	9.1	21.8	8.2	18.3	10.7	5.3	5.1	11.1	1.3
Department of Commerce[a]	2.0	14.5	30.8	28.7	44.8	2.2	11.2	4.1	4.2	3.2	3.9	9.2	7.7	16.7
Department of Defense, Total	113.7	113.9	93.6	87.2	90.6	68.5	75.4	86.7	198.3	193.8	140.6	153.7	176.0	199.5
Department of the Army	65.8	35.6	21.1	14.2	12.3	18.8	29.6	42.0	30.5	22.7	27.2	43.6	47.4	49.7
Department of the Navy	21.9	25.6	17.5	12.3	18.8	12.7	11.6	13.6	53.6	35.5	18.2	28.0	48.4	69.7
Department of the Air Force	18.0	33.3	50.0	44.2	38.6	31.0	30.9	25.6	102.8	105.6	59.2	49.7	50.6	55.5
Advanced Research Projects Agency[b]	8.0	19.3	5.1	....	....	....	....	....	....	....	....	....	....	....
Defense Agencies[b]	....	....	....	16.5	20.9	6.0	3.3	5.5	11.5	30.0	36.0	32.3	29.7	24.6
Department of Health, Education, and Welfare[c]	38.8	37.7	40.5	59.7	70.8	101.2	128.3	60.6	46.7	52.8	31.2	17.4	46.4	68.9
Department of the Interior	2.7	5.8	3.8	13.7	7.9	14.2	19.4	32.3	26.9	14.2	10.6	8.5	15.8	21.7
Department of Transportation[a]	....	....	....	....	....	....	9.8	9.0	8.1	5.6	5.5	10.8	31.6	60.8
Other Agencies														
Atomic Energy Commission	226.6	213.3	286.8	320.7	242.6	299.1	229.3	227.6	165.3	302.5	265.9	312.2	283.1	285.8
Environmental Protection Agency	....	....	....	....	....	....	....	....	....	....	2.0	1.1	2.8	36.1
Federal Aviation Agency[a]	5.0	4.6	8.4	7.2	10.9	7.3	....	....	....	....	....	....	....	....
National Aeronautics and Space Administration[d]	117.7	128.2	245.0	576.7	555.7	530.4	277.4	120.8	65.0	54.8	33.4	40.2	52.7	77.3
National Science Foundation	12.8	22.3	55.7	64.1	67.8	88.2	79.4	65.4	66.9	26.9	23.3	27.9	29.7	38.0
Veterans Administration	4.0	1.2	3.4	3.2	.5	9.9	5.9	5.0	3.3	4.1	2.6	15.0	2.1	11.1
All Other Agencies	1.5	4.7	2.2	.3	4.6	1.7	.5	.3	.8	.4	.1	10.1	5.4	18.8

[a] The Department of Transportation, as of 1966, includes the Bureau of Public Roads and the Office of Transportation Research and Development formerly in the Department of Commerce; the Federal Aviation Agency; and the U.S. Coast Guard formerly under the Treasury Department.

[b] Starting with 1963, Defense Agencies include the Advanced Research Projects Agency and other agencies such as Defense Atomic Support Agency and Defense Communications Agency.

[c] Federal Security Agency prior to fiscal year 1952.

[d] National Advisory Committee for Aeronautics prior to fiscal year 1958.

Table C-98. Federal obligations for research and development, by character of work and R&D plant, fiscal years 1956-73

[Millions of dollars]

Fiscal year	Total	Research		Development	R&D plant
		Basic	Applied		
1956	3,267	206	646	2,136	279
1957	4,389	262	662	3,007	457
1958	4,906	335	744	3,491	336
1959	7,123	517	886	5,291	429
1960	8.080	610	1,331	5,611	528
1961	9,607	825	1,796	6,438	549
1962	11,069	1,106	2,166	7,017	779
1963	13,663	1,389	2,652	8,454	1,168
1964	15,324	1,567	2,898	9,761	1,099
1965	15,746	1,690	3,164	9,760	1,132
1966	16,179	1,844	3,427	10.050	858
1967	17,149	2,015	3,258	11,256	620
1968	16,525	2,072	3,293	10,557	604
1969	16,306	2,094	3,145	10.398	669
1970	15,854	2,062	3,540	9,728	524
1971	16,161	2,132	4,018	9,399	611
1972 (estimated)	17,485	2,395	4,354	10.071	664
1973 (estimated)	18,627	2,604	4,693	10,494	836

Table C-99. Federal obligations for total research, by selected agency, fiscal years 1956-73

[Millions of dollars]

Agency	1956	1957	1958	1959	1960	1961	1962	1963	1964
Total	852	925	1,079	1,403	1,941	2,620	3,273	4,041	4,464
Department of Agriculture	83	95	105	116	121	138	150	160	182
Department of Commerce	8	11	13	19	23	27	29	36	39
Department of Defense[a]	482	445	489	523	861	1,173	1,311	1,605	1,672
Department of Health, Education, and Welfare	83	142	182	240	317	427	574	653	772
Department of the Interior	34	40	41	51	56	65	76	76	90
Department of Transportation	------	------	------	------	------	------	------	------	------
Atomic Energy Commission	87	99	131	170	199	220	247	281	308
Environmental Protection Agency	------	------	------	------	------	------	------	------	------
National Aeronautics and Space Administration[b]	43	47	66	201	264	453	714	1,005	1,177
National Science Foundation	16	30	33	54	68	77	104	141	156
Veterans Administration	6	8	9	12	14	21	27	29	33
All others	11	7	9	16	17	19	40	54	35

Agency	1965	1966	1967	1968	1969	1970	1971	Estimates	
								1972	1973
Total	4,854	5,271	5,273	5,365	5,239	5,602	6,150	6,749	7,297
Department of Agriculture	218	228	237	239	251	272	292	335	346
Department of Commerce	44	41	51	56	56	94	114	144	188
Department of Defense[a]	1,751	1,849	1,591	1,577	1,412	1,557	1,613	1,693	1,793
Department of Health, Education, and Welfare	862	966	1,082	1,147	1,174	1,129	1,302	1,514	1,646
Department of the Interior	98	121	143	152	164	122	139	155	169
Department of Transportation	------	18	45	56	68	88	173	154	190
Atomic Energy Commission	334	371	392	402	417	433	429	427	454
Environmental Protection Agency	------	------	------	------	------	53	54	67	76
National Aeronautics and Space Administration[b]	1,290	1,358	1,379	1,356	1,296	1,410	1,497	1,577	1,646
National Science Foundation	172	224	241	257	258	275	318	424	497
Veterans Administration	37	39	40	44	50	58	62	67	74
All others	48	56	72	79	93	111	157	192	218

[a] Includes pay and allowances of military R&D personnel and support from the procurement and operation and maintenance appropriations.

[b] National Advisory Committee for Aeronautics prior to 1958.

Table C-100. Federal obligations for basic research, by selected agency, fiscal years 1952-73

[Millions of dollars]

Agency	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Total	162	154	148	162	206	262	335	517	610	825	1,106
Department of Agriculture	7	7	8	12	15	19	24	29	34	41	50
Department of Defense[a]	72	65	52	53	78	84	111	137	168	173	204
Department of Health, Education, and Welfare	15	15	17	21	26	38	50	75	103	137	190
Atomic Energy Commission	34	35	40	42	45	55	72	87	104	167	192
National Aeronautics and Space Administration[b]	18	16	14	12	13	16	26	107	97	190	316
National Science Foundation	1	2	5	10	15	30	33	54	68	77	104
All others	14	13	12	12	14	20	19	28	35	39	50

Agency	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total	1,389	1,567	1,690	1,844	2,015	2,072	2,094	2,062	2,132	2,395	2,604
Department of Agriculture	56	68	90	94	100	100	107	116	118	138	145
Department of Defense[a]	231	241	263	262	284	263	276	247	262	265	278
Department of Health, Education, and Welfare	236	274	303	326	372	397	371	388	397	467	523
Atomic Energy Commission	219	238	258	281	302	282	285	287	277	270	283
National Aeronautics and Space Administration[b]	447	524	528	559	603	656	678	637	680	750	803
National Science Foundation	141	155	171	223	239	252	248	245	273	353	402
All others	59	66	77	98	115	122	129	142	125	152	170

[a] Includes pay and allowances of military R&D personnel and support from the procurement and operation and maintenance appropriations starting with fiscal year 1964 data.

[b] National Advisory Committee for Aeronautics prior to 1958.

Table C-101. Federal obligations for applied research, by selected agency, fiscal years 1956-73

[Millions of dollars]

Agency	1956	1957	1958	1959	1960	1961	1962	1963	1964
Total	646	662	744	886	1,331	1,796	2,166	2,652	2,898
Department of Agriculture	68	76	81	87	87	97	101	104	114
Department of Commerce	5	7	8	12	14	15	13	15	16
Department of Defense[a]	404	361	378	386	693	1,000	1,107	1,374	1,431
Department of Health, Education, and Welfare	57	104	133	165	214	291	384	416	497
Department of the Interior	25	25	29	34	36	41	50	47	57
Department of Transportation	------	------	------	------	------	------	------	------	------
Atomic Energy Commission	42	44	59	83	95	53	55	62	71
Environmental Protection Agency	------	------	------	------	------	------	------	------	------
National Aeronautics and Space Administration[b]	29	31	41	95	166	263	398	558	653
National Science Foundation	1	------	------	------	------	------	------	------	1
Veterans Administration	6	7	7	9	11	18	24	26	30
All others	9	7	8	16	14	18	34	49	28

Agency	1965	1966	1967	1968	1969	1970	1971	Estimates	
								1972	1973
Total	3,164	3,427	3,258	3,293	3,145	3,540	4,018	4,354	4,693
Department of Agriculture	128	134	137	140	145	156	174	197	201
Department of Commerce	19	19	27	30	29	55	72	92	128
Department of Defense[a]	1,488	1,587	1,307	1,313	1,135	1,310	1,351	1,429	1,514
Department of Health, Education, and Welfare	559	640	710	750	803	741	905	1,047	1,123
Department of the Interior	57	70	91	102	109	72	86	95	100
Department of Transportation	------	12	33	40	51	67	173	154	189
Atomic Energy Commission	76	90	90	120	132	146	152	157	171
Environmental Protection Agency	------	------	------	------	------	48	48	59	68
National Aeronautics and Space Administration[b]	762	799	775	701	618	773	817	827	843
National Science Foundation	1	2	3	6	11	30	46	71	95
Veterans Administration	33	35	35	38	43	53	59	64	71
All others	41	40	50	53	69	89	135	162	190

[a] Includes pay and allowances of military R&D personnel and support from the procurement and operation and maintenance appropriations starting with fiscal year 1964 data.

[b] National Advisory Committee for Aeronautics prior to 1958.

Table C-102. Federal obligations for development, by selected agency, fiscal years 1956-73

[Millions of dollars]

Agency	1956	1957	1958	1959	1960	1961	1962	1963	1964
Total	2,136	3,007	3,491	5,291	5,611	6,438	7,017	8,454	9,761
Department of Defense[a]	1,786	2,540	2,914	4,638	4,850	5,401	5,411	5,680	5,590
Atomic Energy Commission	324	429	513	530	563	630	783	797	928
National Aeronautics and Space Administration[b]	7	9	11	61	105	324	725	1,852	3,109
All others	19	29	53	62	93	83	98	125	134

Agency	1965	1966	1967	1968	1969	1970	1971	Estimates	
								1972	1973
Total	9,760	10,050	11,256	10,557	10,398	9,728	9,399	10,071	10,494
Department of Defense[a]	5,045	5,174	6,458	6,132	6,284	5,804	5,896	6,681	6,981
Atomic Energy Commission	907	842	866	967	989	913	874	381	921
National Aeronautics and Space Administration[b]	3,662	3,692	3,488	3,073	2,667	2,390	1,761	1,631	1,629
All others	146	342	444	385	458	621	868	878	963

[a] Includes pay and allowances of military R&D personnel and support from the procurement and operation and maintenance appropriations.

[b] National Advisory Committee for Aeronautics prior to 1958.

Table C-103. Federal obligations for research and development, by performer, fiscal years 1955-73

[Millions of dollars]

Performer	1955	1956	1957	1958	1959	1960	1961	1962	1963
Total	2,533	2,988	3,932	4,570	6,694	7,552	9,059	10.290	12,495
Federal intramural[a]	905	1,041	1,220	1,374	1,640	1,726	1,874	2,098	2,279
Industrial firms[b]	1,304	1,579	2,245	2,607	4,246	4,834	5,890	6,565	8,291
Universities and colleges	144	176	224	288	367	459	585	755	900
FFRDC's administered by universities	143	146	168	209	271	323	410	510	546
Other nonprofit institutions[b]	34	40	62	77	106	136	223	289	396
All other performers	3	7	13	15	64	74	77	73	84

Performer	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
									1972	1973
Total	14,225	14,614	15,320	16,529	15,921	15,637	15,330	15,550	16,821	17,791
Federal intramural[a]	2,838	3,093	3,222	3,396	3,493	3,498	3,876	4,166	4,509	4,598
Industrial firms[b]	9,136	9,058	9,384	10,262	9,460	9,125	8,381	8,111	8,636	9,236
Universities and colleges	1,077	1,194	1,350	1,455	1,490	1,536	1,473	1,645	1,915	2,126
FFRDC's administered by universities	587	609	643	666	714	722	750	729	783	818
Other nonprofit institutions[b]	486	550	591	624	619	609	712	696	708	692
All other performers	101	111	130	127	145	147	139	204	270	321

[a] Federal intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

[b] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

Table C-104. Federal obligations for total research, by performer, fiscal years 1963-73

[Millions of dollars]

Performer	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total	4,041	4,464	4,854	5,271	5,273	5,365	5,239	5,602	6,150	6,749	7,297
Federal intramural[a]	1,029	1,292	1,454	1,493	1,574	1,711	1,772	2,033	2,033	2,172	2,273
Industrial firms[b]	1,511	1,479	1,534	1,739	1,506	1,422	1,246	1,367	1,703	1,781	1,994
Universities and colleges	856	990	1,117	1,251	1,348	1,385	1,409	1,352	1,496	1,757	1,953
FFRDC's administered by universities	325	348	385	399	427	417	394	417	399	442	467
Other nonprofit institutions[b]	239	273	275	281	316	306	299	313	367	413	388
All other performers	81	83	89	107	101	124	119	120	153	184	221

[a] Federal intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

[b] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

Table C-105. Federal obligations for basic research, by performer, fiscal years 1958-73

[Millions of dollars]

Performer	1958	1959	1960	1961	1962	1963	1964	1965
Total	335	517	610	825	1,106	1,389	1,567	1,690
Federal intramural[a]	125	173	160	206	251	299	363	424
Industrial firms[b]	25	72	93	149	236	322	336	299
Universities and colleges	127	186	244	293	381	479	564	637
FFRDC's administered by universities	34	51	63	111	153	170	177	196
Other nonprofit institutions[b]	20	28	37	46	59	86	90	96
All other performers	3	8	11	19	26	33	35	38

Performer	1966	1967	1968	1969	1970	1971	Estimates	
							1972	1973
Total	1,844	2,015	2,072	2,094	2,062	2,132	2,395	2,604
Federal intramural[a]	449	478	512	577	658	535	578	590
Industrial firms[b]	325	366	389	399	320	442	500	552
Universities and colleges	728	784	786	766	718	794	913	1,024
FFRDC's administered by universities	213	249	254	255	267	260	287	301
Other nonprofit institutions[b]	98	108	101	73	63	75	85	94
All other performers	33	30	29	25	35	27	33	43

[a] Federal intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

[b] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

Table C-106. Federal obligations for applied research, by performer, fiscal years 1963-73

[Millions of dollars]

Performer	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total	2,652	2,898	3,164	3,427	3,258	3,293	3,145	3,540	4,018	4,354	4,693
Federal intramural[a]	730	928	1,029	1,045	1,095	1,199	1,195	1,375	1,499	1,594	1,683
Industrial firms[b]	1,189	1,143	1,235	1,414	1,140	1,033	848	1,047	1,261	1,282	1,443
Universities and colleges	377	425	480	523	565	599	643	633	701	844	929
FFRDC's administered by universities	155	171	189	187	179	163	139	150	139	155	166
Other nonprofit institutions[b]	153	182	180	183	208	205	226	250	292	328	294
All other performers	48	48	51	74	71	95	95	85	126	151	179

[a] Federal intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

[b] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

Table C-107. Federal obligations for development, by performer, fiscal years 1963-73

[Millions of dollars]

Performer	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total	8,454	9,761	9,760	10,050	11,256	10,557	10,398	9,728	9,399	10,071	10,494
Federal intramural[a]	1,250	1,546	1,639	1,728	1,822	1,782	1,726	1,843	2,132	2,337	2,325
Industrial firms[b]	6,780	7,657	7,524	7,645	8,756	8,038	7,878	7,014	6,408	6,854	7,242
Universities and colleges	44	87	77	99	106	105	127	121	149	158	173
FFRDC's administered by universities	221	239	224	244	239	297	328	332	330	341	351
Other nonprofit institutions[b]	157	213	274	310	307	314	310	398	329	295	304
All other performers	3	18	22	23	25	21	28	19	51	86	100

[a] Federal intramural activities cover costs associated with the administration of intramural and extramural programs by Federal personnel as well as actual intramural performance.

[b] Includes Federally Funded Research and Development Centers (FFRDC's) administered by this sector.

Table C-108. Federal obligations for total research, by field of science, fiscal years 1956-73

[Millions of dollars]

Field of science	1956	1957	1958	1959	1960	1961	1962
Total, all fields	852	925	1,079	1,403	1,941	2,620	3,273
Life sciences	208	292	342	417	511	629	810
Psychology	(a)	(a)	(a)	24	38	51	57
Physical sciences[b] Environmental sciences[b]	246	263	334	464	608	860	1,029
Mathematics	11	11	14	18	25	40	64
Engineering	357	322	350	415	690	864	1,059
Social sciences	30	36	40	31	35	45	63
Other sciences	(a)	(a)	(a)	33	33	132	190

Field of science	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total, all fields	4,041	4,464	4,854	5,271	5,273	5,365	5,239	5,602	6,150	6,749	7,297
Life sciences	922	1,045	1,167	1,301	1,451	1,537	1,501	1,533	1,673	1,968	2,126
Psychology	72	95	103	100	108	98	103	113	116	140	145
Physical sciences[b]	884	931	1,029	1,077	1,074	1,131	1,169	1,010	1,043	1,116	1,231
Environmental sciences[b]	455	671	676	753	670	663	551	587	677	764	805
Mathematics	87	93	105	123	130	119	116	102	122	139	142
Engineering	1,445	1,450	1,576	1,677	1,555	1,569	1,499	1,968	2,111	2,163	2,258
Social sciences	80	102	127	166	189	195	220	216	306	330	403
Other sciences	97	77	70	74	95	53	80	72	103	129	187

[a] Not available.

[b] Physical sciences and environmental sciences not separately identified prior to 1963.

Table C-109. Federal obligations for basic research, by field of science, fiscal years 1956-73

[Millions of dollars]

Field of science	1956	1957	1958	1959	1960	1961	1962
Total, all fields	206	262	335	517	610	825	1,106
Life sciences	59	84	99	135	172	238	313
Psychology	(a)	(a)	(a)	9	17	21	28
Physical sciences[b]	120	147	192	291	319	443	604
Environmental sciences[b]							
Mathematics	6	7	11	14	18	21	26
Engineering	17	19	25	58	76	82	116
Social sciences	4	6	9	5	8	11	18
Other sciences	(a)	(a)	(a)	4	(c)	8	2

Field of science	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total, all fields	1,389	1,567	1,690	1,844	2,015	2,072	2,094	2,062	2,132	2,395	2,604
Life sciences	380	424	487	552	612	612	569	576	596	738	814
Psychology	36	47	58	53	60	55	55	57	49	58	62
Physical sciences[b]	515	564	639	667	713	731	819	704	743	770	872
Environmental sciences[b]	252	310	263	295	321	351	319	352	393	456	467
Mathematics	42	52	57	60	65	67	57	59	52	60	60
Engineering	137	135	147	168	184	191	191	243	220	226	209
Social sciences	25	34	37	44	57	62	72	66	70	81	106
Other sciences	2	2	2	4	4	3	11	4	10	8	14

[a] Not available.
[b] Physical sciences and environmental sciences not separately identified prior to 1963.
[c] Less than $500,000.

Table C-110. Federal obligations for applied research, by field of science, fiscal years 1956-73

[Millions of dollars]

Field of science	1956	1957	1958	1959	1960	1961	1962
Total, all fields	646	662	744	886	1,331	1,796	2,166
Life sciences	149	208	243	282	340	391	498
Psychology	(a)	(a)	(a)	15	21	30	29
Physical sciences[b]	126	116	142	173	289	417	425
Environmental sciences[b]							
Mathematics	5	4	3	5	7	19	38
Engineering	340	304	325	357	614	781	943
Social sciences	26	30	31	26	27	34	45
Other sciences	(a)	(a)	(a)	28	33	124	189

Field of science	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates	
										1972	1973
Total, all fields	2,652	2,898	3,164	3,427	3,258	3,293	3,145	3,540	4,018	4,354	4,693
Life sciences	542	621	680	749	839	925	932	957	1,078	1,229	1,312
Psychology	35	48	46	47	48	43	49	56	67	83	83
Physical sciences[b]	369	367	390	410	361	400	350	306	299	347	359
Environmental sciences[b]	203	361	413	458	349	312	232	234	285	309	337
Mathematics	45	41	48	62	65	53	59	43	69	78	82
Engineering	1,308	1,316	1,429	1,510	1,371	1,378	1,307	1,725	1,891	1,938	2,049
Social sciences	55	68	90	121	132	134	148	150	236	250	297
Other sciences	95	75	68	69	92	48	69	68	92	121	173

[a] Not available.
[b] Physical sciences and environmental sciences not separately identified prior to 1963.

Table C-111. Federal obligations for research and development, by geographic division and State fiscal years 1963, 1965, 1968, 1969, 1970, and 1971

[Millions of dollars]

Division and State	1963	1965	1968	1969	1970	1971
United States, total	$12,250.5[a]	$14,356.8	$15,690.2	$15,354.6	$14,980.8	$15,239.8
New England	$ 702.2	$ 992.7	$ 1,009.4	$ 1,085.7	$ 1,000.8	$ 1,148.8
Connecticut	139.3	184.5	133.2	223.6	160.0	149.9
Maine	5.3	4.3	6.0	14.3	13.3	13.6
Massachusetts	515.1	733.7	795.7	775.0	760.9	887.0
New Hampshire	16.9	28.8	36.6	31.0	27.3	34.0
Rhode Island	20.5	37.5	31.1	32.8	29.9	50.5
Vermont	5.2	4.0	6.8	9.0	9.5	13.7
Middle Atlantic	$ 1,789.2	$ 2,228.6	$ 2,473.4	$ 2,436.1	$ 2,516.9	$ 2,413.5
New Jersey	410.1	410.7	681.8	708.9	742.5	745.1
New York	944.2	1,289.3	1,174.9	1,107.0	1,235.6	1,119.5
Pennsylvania	434.9	528.7	616.7	620.3	538.8	548.9
East North Central	$ 819.5	$ 923.7	$ 1,294.0	$ 1,044.3	$ 1,038.8	$ 1,121.7
Illinois	203.9	191.7	239.3	251.2	239.6	249.1
Indiana	57.3	71.9	82.9	108.8	91.9	74.6
Michigan	154.4	155.2	203.4	167.4	162.8	187.3
Ohio	304.3	379.1	653.6	432.6	457.3	518.1
Wisconsin	99.7	125.8	114.8	84.2	87.1	92.6
West North Central	$ 376.7	$ 408.7	$ 321.1	$ 328.5	$ 475.4	$ 786.0
Iowa	23.3	28.8	41.7	34.2	32.7	32.9
Kansas	21.5	25.7	19.8	39.6	16.6	24.3
Minnesota	73.6	106.3	111.1	89.3	109.3	102.8
Missouri	236.6	231.7	121.1	141.9	291.2	596.9
Nebraska	4.8	7.7	15.4	11.3	10.6	10.4
North Dakota	3.4	5.0	6.0	6.8	8.9	9.1
South Dakota	13.5	3.5	6.0	5.4	6.1	9.6
South Atlantic	$ 1,685.3	$ 2,154.9	$ 2,819.7	$ 2,961.3	$ 2,899.2	$ 3,224.6
Delaware	24.6	7.1	13.9	16.1	16.3	13.0
District of Columbia	403.9	374.3	443.2	444.3	468.5	478.2
Florida	340.9	459.8	799.1	884.5	824.8	890.4
Georgia	26.7	58.4	280.7	276.8	72.3	78.8
Maryland	675.7	876.6	905.9	961.8	1,063.4	1,201.2
North Carolina	27.0	57.8	62.4	58.5	63.9	82.7
South Carolina	19.8	17.1	18.7	17.1	17.8	23.4
Virginia	158.8	284.2	275.2	286.3	352.7	424.9
West Virginia	7.9	19.6	20.6	16.0	19.6	32.1
East South Central	$ 420.1	$ 628.3	$ 655.3	$ 597.5	$ 599.7	$ 618.2
Alabama	246.8	370.7	405.7	358.4	357.2	360.0
Kentucky	11.0	17.1	24.1	21.4	20.4	23.0
Mississippi	16.5	36.7	26.5	26.0	28.3	46.7
Tennessee	145.8	203.7	199.1	191.6	193.8	188.5

Middle Atlantic	$ 1,789.2	$ 2,228.6	$ 2,473.4	$ 2,436.1	$ 2,516.9	$ 2,413.5
New Jersey	410.1	410.7	681.8	708.9	742.5	745.1
New York	944.2	1,239.3	1,174.9	1,107.0	1,235.6	1,119.5
Pennsylvania	434.9	528.7	616.7	620.3	538.8	548.9
East North Central	$ 819.5	$ 923.7	$ 1,294.0	$ 1,044.3	$ 1,038.8	$ 1,121.7
Illinois	203.9	191.7	239.3	251.2	239.6	249.1
Indiana	57.3	71.9	82.9	108.8	91.9	74.6
Michigan	154.4	155.2	203.4	167.4	162.8	187.3
Ohio	304.3	379.1	653.6	432.6	457.3	518.1
Wisconsin	99.7	125.8	114.8	84.2	87.1	92.6
West North Central	$ 376.7	$ 408.7	$ 321.1	$ 328.5	$ 475.4	$ 786.0
Iowa	23.3	28.8	41.7	34.2	32.7	32.9
Kansas	21.5	25.7	19.8	39.6	16.6	24.3
Minnesota	73.6	106.3	111.1	89.3	109.3	102.8
Missouri	236.6	231.7	121.1	141.9	291.2	596.9
Nebraska	4.8	7.7	15.4	11.3	10.6	10.4
North Dakota	3.4	5.0	6.0	6.8	8.9	9.1
South Dakota	13.5	3.5	6.0	5.4	6.1	9.6
South Atlantic	$ 1,685.3	$ 2,154.9	$ 2,819.7	$ 2,961.3	$ 2,899.2	$ 3,224.6
Delaware	24.6	7.1	13.9	16.1	16.3	13.0
District of Columbia	403.9	374.3	443.2	444.3	468.5	478.2
Florida	340.9	459.8	799.1	884.5	824.8	890.4
Georgia	26.7	58.4	280.7	276.8	72.3	78.8
Maryland	675.7	876.6	905.9	961.8	1,063.4	1,201.2
North Carolina	27.0	57.8	62.4	58.5	63.9	82.7
South Carolina	19.8	17.1	18.7	17.1	17.8	23.4
Virginia	158.8	284.2	275.2	286.3	352.7	424.9
West Virginia	7.9	19.6	20.6	16.0	19.6	32.1
East South Central	$ 420.1	$ 628.3	$ 655.3	$ 597.5	$ 599.7	$ 618.2
Alabama	246.8	370.7	405.7	358.4	357.2	360.0
Kentucky	11.0	17.1	24.1	21.4	20.4	23.0
Mississippi	16.5	36.7	26.5	26.0	28.3	46.7
Tennessee	145.8	203.7	199.1	191.6	193.8	188.5
West South Central	$ 608.2	$ 1,143.1	$ 1,188.9	$ 894.3	$ 834.9	$ 733.1
Arkansas	4.2	6.6	8.1	7.4	9.8	20.8
Louisiana	189.2	377.1	272.4	171.8	146.5	90.1
Oklahoma	16.9	28.4	24.0	20.1	29.5	26.3
Texas	397.9	731.0	884.4	695.0	649.1	595.9
Mountain	$ 1,068.6	$ 990.1	$ 1,093.6	$ 1,136.7	$ 1,136.8	$ 1,127.4
Arizona	174.6	76.6	71.4	79.2	72.3	88.7
Colorado	240.8	212.3	265.3	264.4	274.1	264.2
Idaho	29.7	63.6	65.6	69.6	75.0	75.3
Montana	8.5	8.6	8.3	8.3	11.6	17.6
Nevada	128.9	154.5	223.6	232.3	190.9	159.0
New Mexico	345.9	425.3	413.3	426.3	444.1	458.7
Utah	135.8	45.0	39.7	49.8	51.1	55.8
Wyoming	4.5	4.2	6.4	6.8	7.2	8.1
Pacific	$ 4,665.2	$ 4,849.0	$ 4,774.3	$ 4,813.5	$ 4,404.1	$ 4,004.9
Alaska	12.1	14.4	61.8	68.6	43.2	58.2
California	4,296.7	4,553.3	4,298.6	4,289.8	3,871.1	3,295.4
Hawaii	7.1	41.5	35.0	37.7	43.8	38.3
Oregon	18.2	25.6	35.0	36.1	33.8	41.9
Washington	331.1	214.3	343.9	381.2	412.2	571.2
Outlying areas	6.8	9.2	12.8	11.6	17.3	18.6
Offices abroad	3.1	28.5	47.6	45.1	56.8	42.9

[a]Detail does not add to total because some funds were not allocated geographically.

Table C-112. Federal obligations for R&D plant, by geographic division and State, fiscal years 1963, 1965, 1968, 1969, 1970, and 1971

[Millions of dollars]

Division and State	1963	1965	1968	1969	1970	1971
United States, total	$1,161.6	$1,111.4	$ 599.8	$ 663.6	$ 519.6	$ 586.0
New England	31.1	38.5	55.9	28.3	15.0	15.7
Connecticut	9.6	6.5	8.8	1.4	2.8	1.5
Maine	.1	.2	.1	.1	.1	-------
Massachusetts	19.4	27.8	45.2	25.5	10.7	9.7
New Hampshire	1.0	.1	.6	.1	(a)	2.0
Rhode Island	1.0	1.5	.9	.9	1.3	2.1
Vermont	-------	2.3	.2	.4	(a)	.4
Middle Atlantic	$ 75.1	$ 127.7	$ 73.6	$ 76.1	$ 51.5	$ 55.7
New Jersey	9.6	27.7	11.7	7.8	5.6	5.0
New York	42.9	66.8	43.7	43.7	26.7	33.9
Pennsylvania	22.7	33.2	18.2	24.6	19.2	16.8
East North Central	$ 95.6	$ 80.7	$ 62.1	$ 86.4	$ 119.9	$ 100.1
Illinois	39.4	32.4	31.4	42.0	94.7	85.2
Indiana	1.7	3.9	3.6	.9	.4	.8
Michigan	9.7	2.9	3.3	5.1	3.8	.9
Ohio	40.4	35.8	20.7	32.8	20.3	10.1
Wisconsin	4.4	5.7	3.1	5.7	.6	3.1
West North Central	$ 13.8	$ 17.6	$ 14.2	$ 12.7	$ 9.3	$ 10.8
Iowa	4.2	3.0	7.3	1.8	1.2	1.5
Kansas	.2	.9	.7	3.9	.1	.2
Minnesota	2.6	9.1	3.3	1.1	.8	4.1
Missouri	2.7	2.9	.7	1.3	4.2	2.2
Nebraska	1.9	1.0	1.1	3.5	.9	1.2
North Dakota	2.1	.6	.5	.6	.1	.1
South Dakota	.1	.2	.8	.5	2.1	1.5
South Atlantic	$ 359.4	$ 249.9	$ 157.2	$ 115.7	$ 72.3	$ 77.0
Delaware	.5	.1	.5	(a)	(a)	-------
District of Columbia	6.4	3.8	14.5	8.3	6.4	5.1
Florida	279.1	181.1	76.9	57.5	33.2	30.8
Georgia	5.4	5.2	4.0	2.3	2.0	2.3
Maryland	38.0	38.9	36.6	30.6	20.3	29.7
North Carolina	1.7	3.9	3.6	4.5	3.1	.4
South Carolina	1.4	2.0	1.5	3.2	1.8	1.3
Virginia	23.6	13.3	15.8	4.0	3.5	7.0
West Virginia	3.3	1.4	3.7	5.3	1.9	.4
East South Central	$ 191.3	$ 138.9	$ 18.0	$ 30.7	$ 16.8	$ 18.3
Alabama	155.0	65.8	2.2	6.2	1.8	3.9
Kentucky	(a)	.9	.3	.4	.8	.3
Mississippi	.2	36.9	3.7	.2	.8	.4
Tennessee	36.1	35.3	11.7	24.0	13.4	13.7
West South Central	$ 75.1	$ 91.7	$ 17.3	$ 8.0	$ 9.4	$ 11.7
Arkansas	.6	.4	.2	-------	.1	(a)
Louisiana	2.6	10.8	1.5	.5	1.1	5.1

Pennsylvania	22.7	33.2	18.2	24.6	19.2	16.8
East North Central	$ 95.6	$ 80.7	$ 62.1	$ 86.4	$ 119.9	$ 100.1
Illinois	39.4	32.4	31.4	42.0	94.7	85.2
Indiana	1.7	3.9	3.6	.9	.4	.8
Michigan	9.7	2.9	3.3	5.1	3.8	.9
Ohio	40.4	35.8	20.7	32.8	20.3	10.1
Wisconsin	4.4	5.7	3.1	5.7	.6	3.1
West North Central	$ 13.8	$ 17.6	$ 14.2	$ 12.7	$ 9.3	$ 10.8
Iowa	4.2	3.0	7.3	1.8	1.2	1.5
Kansas	.2	.9	.7	3.9	.1	.2
Minnesota	2.6	9.1	3.3	1.1	.8	4.1
Missouri	2.7	2.9	.7	1.3	4.2	2.2
Nebraska	1.9	1.0	1.1	3.5	.9	1.2
North Dakota	2.1	.6	.5	.6	.1	.1
South Dakota	.1	.2	.8	.5	2.1	1.5
South Atlantic	$ 359.4	$ 249.9	$ 157.2	$ 115.7	$ 72.3	$ 77.0
Delaware	.5	.1	.5	(a)	(a)	-------
District of Columbia	6.4	3.8	14.5	8.3	6.4	5.1
Florida	279.1	181.1	76.9	57.5	33.2	30.8
Georgia	5.4	5.2	4.0	2.3	2.0	2.3
Maryland	38.0	38.9	36.6	30.6	20.3	29.7
North Carolina	1.7	3.9	3.6	4.5	3.1	.4
South Carolina	1.4	2.0	1.5	3.2	1.8	1.3
Virginia	23.6	13.3	15.8	4.0	3.5	7.0
West Virginia	3.3	1.4	3.7	5.3	1.9	.4
East South Central	$ 191.3	$ 138.9	$ 18.0	$ 30.7	$ 16.8	$ 18.3
Alabama	155.0	65.8	2.2	6.2	1.8	3.9
Kentucky	(a)	.9	.3	.4	.8	.3
Mississippi	.2	36.9	3.7	.2	.8	.4
Tennessee	36.1	35.3	11.7	24.0	13.4	13.7
West South Central	$ 75.1	$ 91.7	$ 17.3	$ 8.0	$ 9.4	$ 11.7
Arkansas	.6	.4	.2	-------	.1	(a)
Louisiana	2.6	10.8	1.5	.5	1.1	5.1
Oklahoma	2.7	3.3	.2	.9	.1	.1
Texas	69.3	77.3	15.3	6.5	8.1	6.5
Mountain	$ 134.3	$ 124.2	$ 77.8	$ 135.3	$ 112.4	$ 102.4
Arizona	3.5	9.4	10.9	2.0	1.6	1.3
Colorado	5.8	8.2	2.8	4.3	5.2	8.2
Idaho	30.2	33.0	8.8	31.0	23.0	20.3
Montana	.3	.2	.2	.5	(a)	.5
Nevada	39.6	24.7	11.0	17.1	17.2	16.9
New Mexico	52.0	46.1	43.2	77.5	63.6	54.1
Utah	2.7	2.0	.8	2.9	1.0	.6
Wyoming	.2	.6	.1	.1	.6	.4
Pacific	$ 165.9	$ 218.4	$ 114.9	$ 145.0	$ 104.4	$ 178.3
Alaska	(a)	5.1	2.1	3.0	.5	1.4
California	147.3	189.5	92.2	121.2	85.9	119.8
Hawaii	1.6	2.1	3.7	.8	.5	2.2
Oregon	3.8	4.6	2.4	1.5	2.3	1.2
Washington	13.2	17.1	14.6	18.6	15.3	53.7
Outlying areas	16.8	17.7	7.2	4.6	3.5	5.2
Offices abroad	3.1	6.3	1.6	20.7	5.3	10.8

[a] Less than $50,000.

APPENDIX D

Statistical Tables

Part II

Federal Funds for Scientific and Technical Information

Page

D-1. Summary, fiscal years 1971, 1972, and 1973 194
D-2. By agency, fiscal years 1971, 1972, and 1973. 195
D-3. Intramural and extramural obligations, by agency, fiscal years 1971, 1972, and 1973 196
D-4. By agency and activity, fiscal year 1971 197
D-5. By agency and activity, fiscal year 1972 (estimated) 198
D-6. By agency and activity, fiscal year 1973 (estimated) 199
D-7. Intramural and extramural obligations, by agency and activity, fiscal year 1971 200
D-8. Intramural and extramural obligations, by agency and activity, fiscal year 1972 (estimated) 201
D-9. Intramural and extramural obligations, by agency and activity, fiscal year 1973 (estimated) 202

NOTE

- Sour
Fou

- Esti
FY
not
port

- Obli
ance
priv
the
purp
cal i
info
port

- Obli
Deve
men
niqu
R&D

- Defe
sear
Age
Defe

- The
trati
lishe
form
Busi

X D

bles

rt II

tific

tion

Page

D-1. Summary, fiscal years 1971, 1972, and 1973 194

D-2. By agency, fiscal years 1971, 1972, and 1973. 195

D-3. Intramural and extramural obligations, by agency, fiscal years 1971, 1972, and 1973 196

D-4. By agency and activity, fiscal year 1971 197

D-5. By agency and activity, fiscal year 1972 (estimated) 198

D-6. By agency and activity, fiscal year 1973 (estimated) 199

D-7. Intramural and extramural obligations, by agency and activity, fiscal year 1971 200

D-8. Intramural and extramural obligations, by agency and activity, fiscal year 1972 (estimated) 201

D-9. Intramural and extramural obligations, by agency and activity, fiscal year 1973 (estimated) 202

NOTES

- Source of data is the National Science Foundation.

- Estimates for 1973 are based on *The Budget, FY 1973,* as submitted to Congress, and do not reflect subsequent appropriation and apportionment actions.

- Obligations reported for extramural performance are limited to contracts or grants with private individuals or organizations outside the Government that have as their primary purpose the support of scientific and technical information. Excluded are obligations for information efforts that supplement or support work under R&D contracts or grants.

- Obligations for category 4, Research and Development in Information Sciences, Documentation and Information Systems, Techniques and Devices, are also reported under R&D obligations in part I.

- Defense Agencies include the Advanced Research Projects Agency, the Defense Nuclear Agency, the Defense Supply Agency, and the Defense Communications Agency.

- The Social and Economic Statistics Administration, Department of Commerce, was established in fiscal year 1972 and includes the former Bureau of the Census and Office of Business Economics.

TABLE D-1. SUMMARY OF FEDERAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

ACTIVITY	ACTUAL, 1971			ESTIMATES					
				1972			1973		
	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL
TOTAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION................	397,628	270,307	127,321	419,020	278,279	140,741	452,712	393,625	159,087
PUBLICATION AND DISTRIBUTION...........	105,968	88,508	17,460	113,709	95,619	18,090	122,035	101,945	20,090
PUBLICATION AND DISTRIBUTION...........	99,626	84,780	14,846	106,433	91,461	14,972	114,220	97,653	16,567
SUPPORT OF PUBLICATIONS................	6,342	3,728	2,614	7,276	4,158	3,118	7,815	4,292	3,523
DOCUMENTATION, REFERENCE AND INFORMATION SERVICES.................	193,798	143,245	50,553	198,306	142,900	55,406	217,109	150,258	66,851
LIBRARY AND REFERENCE SERVICES.........	154,883	126,923	27,960	153,963	124,603	29,360	158,662	128,365	30,297
SPECIALIZED INFORMATION CENTERS........	34,587	15,063	19,524	40,171	17,102	23,069	54,640	20,764	33,876
TRANSLATIONS...........................	4,328	1,259	3,069	4,172	1,195	2,977	3,807	1,129	2,678
SYMPOSIA AND AUDIO/VISUAL MEDIA........	32,826	22,914	9,912	33,432	22,804	10,628	34,002	22,964	11,038
SYMPOSIA AND TECHNICAL MEETINGS........	21,763	15,923	5,840	22,325	15,972	6,353	22,734	16,185	6,549
AUDIO/VISUAL MEDIA AND OTHER FORMS OF.. NONPRINTED COMMUNICATION.............	11,063	6,991	4,072	11,107	6,832	4,275	11,268	6,779	4,489
RESEARCH AND DEVELOPMENT IN INFORMATION SCIENCES, DOCUMENTATION AND INFORMATION SYSTEMS, TECHNIQUES AND DEVICES	65,036	15,640	49,396	73,573	16,956	56,617	79,566	18,458	61,108

TABLE D-2. FEDERAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	ACTUAL, 1971	ESTIMATES	
		1972	1973
TOTAL, ALL AGENCIES	397,628	419,020	452,712
DEPARTMENTS			
DEPARTMENT OF AGRICULTURE, TOTAL	10,256	10,895	11,037
AGRICULTURAL RESEARCH SERVICE	2,875	3,087	3,241
COOPERATIVE STATE RESEARCH SERVICE	184	177	177
ECONOMIC RESEARCH SERVICE	400	410	412
FARMER COOPERATIVE SERVICE	50	50	50
FOREST SERVICE	2,730	2,973	3,085
NATIONAL AGRICULTURAL LIBRARY	4,007	4,188	4,061
STATISTICAL REPORTING SERVICE	10	10	11
DEPARTMENT OF COMMERCE, TOTAL	68,958	75,253	83,392
NATIONAL BUREAU OF STANDARDS	12,266	13,335	16,291
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	2,395	2,483	2,729
OFFICE OF TELECOMMUNICATIONS	22	109	128
PATENT OFFICE	53,750	58,796	63,710
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	525	530	534
DEPARTMENT OF DEFENSE, TOTAL	141,254	145,874	152,030
DEPARTMENT OF THE ARMY	73,187	71,200	71,275
DEPARTMENT OF THE NAVY	15,654	15,129	16,385
DEPARTMENT OF THE AIR FORCE	10,432	8,931	9,459
DEFENSE AGENCIES	41,971	50,604	54,901
DEPARTMENTWIDE FUNDS	10	10	10
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	72,598	72,986	86,884
FOOD AND DRUG ADMINISTRATION	5,424	6,257	9,808
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	7,547	8,882	9,161
NATIONAL INSTITUTES OF HEALTH	41,343	46,216	51,827
OFFICE OF EDUCATION	17,981	11,279	15,730
SOCIAL SECURITY ADMINISTRATION	303	352	358
DEPARTMENT OF THE INTERIOR, TOTAL	14,254	14,234	15,337
BUREAU OF MINES	871	900	900
BUREAU OF OUTDOOR RECREATION	12	2	16
BUREAU OF RECLAMATION	533	457	507
BUREAU OF SPORT FISHERIES AND WILDLIFE	874	734	743
OFFICE OF LIBRARY SERVICES	931	886	1,170
GEOLOGICAL SURVEY	10,055	10,150	10,921
OFFICE OF COAL RESEARCH	10	22	27
OFFICE OF SALINE WATER	152	158	128
OFFICE OF WATER RESOURCES RESEARCH	816	925	925
DEPARTMENT OF JUSTICE, TOTAL	162	1,252	1,710
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	162	1,252	1,710
DEPARTMENT OF LABOR, TOTAL	132	132	132
MANPOWER ADMINISTRATION	132	132	132
DEPARTMENT OF STATE, TOTAL	2,783	1,917	2,510
DEPARTMENTAL FUNDS	108	110	117
AGENCY FOR INTERNATIONAL DEVELOPMENT	2,675	1,807	2,393

FARMER COOPERATIVE SERVICE	50	50	50
FOREST SERVICE	2,730	2,973	3,085
NATIONAL AGRICULTURAL LIBRARY	4,007	4,188	4,061
STATISTICAL REPORTING SERVICE	10	10	11
DEPARTMENT OF COMMERCE, TOTAL	68,958	75,253	83,392
NATIONAL BUREAU OF STANDARDS	12,266	13,335	16,291
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	2,395	2,483	2,729
OFFICE OF TELECOMMUNICATIONS	22	109	128
PATENT OFFICE	53,750	58,796	63,710
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	525	530	534
DEPARTMENT OF DEFENSE, TOTAL	141,254	145,874	152,030
DEPARTMENT OF THE ARMY	73,187	71,200	71,275
DEPARTMENT OF THE NAVY	15,654	15,129	16,385
DEPARTMENT OF THE AIR FORCE	10,432	8,931	9,459
DEFENSE AGENCIES	41,971	50,604	54,901
DEPARTMENTWIDE FUNDS	10	10	10
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	72,598	72,986	86,884
FOOD AND DRUG ADMINISTRATION	5,424	6,257	9,808
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	7,547	8,882	9,161
NATIONAL INSTITUTES OF HEALTH	41,343	46,216	51,827
OFFICE OF EDUCATION	17,981	11,279	15,730
SOCIAL SECURITY ADMINISTRATION	303	352	358
DEPARTMENT OF THE INTERIOR, TOTAL	14,254	14,234	15,337
BUREAU OF MINES	871	900	900
BUREAU OF OUTDOOR RECREATION	12	2	16
BUREAU OF RECLAMATION	533	457	507
BUREAU OF SPORT FISHERIES AND WILDLIFE	874	734	743
OFFICE OF LIBRARY SERVICES	931	886	1,170
GEOLOGICAL SURVEY	10,055	10,150	10,921
OFFICE OF COAL RESEARCH	10	22	27
OFFICE OF SALINE WATER	152	158	128
OFFICE OF WATER RESOURCES RESEARCH	816	925	925
DEPARTMENT OF JUSTICE, TOTAL	162	1,252	1,710
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	162	1,252	1,710
DEPARTMENT OF LABOR, TOTAL	132	132	132
MANPOWER ADMINISTRATION	132	132	132
DEPARTMENT OF STATE, TOTAL	2,783	1,917	2,510
DEPARTMENTAL FUNDS	108	110	117
AGENCY FOR INTERNATIONAL DEVELOPMENT	2,675	1,807	2,393
DEPARTMENT OF TRANSPORTATION, TOTAL	4,209	7,604	8,607
FEDERAL AVIATION ADMINISTRATION	430	530	590
FEDERAL HIGHWAY ADMINISTRATION	1,440	1,685	1,695
FEDERAL RAILROAD ADMINISTRATION	123	675	400
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	457	1,450	1,940
OFFICE OF THE SECRETARY	1,116	1,904	2,306
UNITED STATES COAST GUARD	643	1,360	1,676
OTHER AGENCIES			
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	68	68	95
ATOMIC ENERGY COMMISSION	4,881	5,117	4,845
ENVIRONMENTAL PROTECTION AGENCY	3,191	3,337	3,738
FEDERAL COMMUNICATIONS COMMISSION	32	34	17
LIBRARY OF CONGRESS	24,995	30,459	31,049
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	26,979	27,253	28,193
NATIONAL SCIENCE FOUNDATION	14,053	11,943	11,580
OFFICE OF EMERGENCY PREPAREDNESS	8	8	3
OFFICE OF SCIENCE AND TECHNOLOGY	130	120	70
POSTAL SERVICE	61	-	-
SMITHSONIAN INSTITUTION	2,195	3,980	4,832
TENNESSEE VALLEY AUTHORITY	125	143	151
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	204	211	100
VETERANS ADMINISTRATION	6,100	6,200	6,400

TABLE D-3. FEDERAL INTRAMURAL AND EXTRAMURAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY, FISCAL YEARS 1971, 1972, AND 1973

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	INTRAMURAL			EXTRAMURAL		
	ACTUAL, 1971	ESTIMATES		ACTUAL, 1971	ESTIMATES	
		1972	1973		1972	1973
TOTAL, ALL AGENCIES	270,307	278,279	293,625	127,321	140,741	159,087
DEPARTMENTS						
DEPARTMENT OF AGRICULTURE, TOTAL	9,868	10,687	10,810	388	208	227
AGRICULTURAL RESEARCH SERVICE	2,875	3,087	3,241	-	-	-
COOPERATIVE STATE RESEARCH SERVICE	184	177	177	-	-	-
ECONOMIC RESEARCH SERVICE	400	410	412	-	-	-
FARMER COOPERATIVE SERVICE	50	50	50	-	-	-
FOREST SERVICE	2,730	2,973	3,085	-	-	-
NATIONAL AGRICULTURAL LIBRARY	3,619	3,980	3,834	388	208	227
STATISTICAL REPORTING SERVICE	10	10	11	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	67,814	74,178	81,806	1,144	1,075	1,586
NATIONAL BUREAU OF STANDARDS	11,677	12,777	15,231	589	558	1,060
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1,853	1,979	2,216	542	504	513
OFFICE OF TELECOMMUNICATIONS	22	109	128	-	-	-
PATENT OFFICE	53,750	58,796	63,710	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	512	517	521	13	13	13
DEPARTMENT OF DEFENSE, TOTAL	83,007	82,318	83,081	58,247	63,556	68,949
DEPARTMENT OF THE ARMY	58,716	56,900	56,975	14,471	14,300	14,300
DEPARTMENT OF THE NAVY	7,928	7,594	8,510	7,726	7,535	7,875
DEPARTMENT OF THE AIR FORCE	5,033	5,481	5,876	5,399	3,450	3,583
DEFENSE AGENCIES	11,330	12,343	11,720	30,641	38,261	43,181
DEPARTMENTWIDE FUNDS	-	-	-	10	10	10
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	37,517	33,208	36,270	35,081	39,778	50,614
FOOD AND DRUG ADMINISTRATION	2,358	2,704	3,587	3,066	3,553	6,221
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	3,350	3,555	3,845	4,197	5,327	5,316
NATIONAL INSTITUTES OF HEALTH	23,565	25,483	27,190	17,778	20,733	24,637
OFFICE OF EDUCATION	7,941	1,114	1,290	10,040	10,165	14,440
SOCIAL SECURITY ADMINISTRATION	303	352	358	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	13,752	13,644	14,739	502	590	598
BUREAU OF MINES	871	900	900	-	-	-
BUREAU OF OUTDOOR RECREATION	12	2	14	-	-	2
BUREAU OF RECLAMATION	523	446	494	10	11	13
BUREAU OF SPORT FISHERIES AND WILDLIFE	765	550	634	109	184	109
OFFICE OF LIBRARY SERVICES	931	886	1,095	-	-	75
GEOLOGICAL SURVEY	10,055	10,150	10,921	-	-	-
OFFICE OF COAL RESEARCH	7	17	21	3	5	6
OFFICE OF SALINE WATER	129	135	105	23	23	23
OFFICE OF WATER RESOURCES RESEARCH	459	558	555	357	367	370
DEPARTMENT OF JUSTICE, TOTAL	142	405	610	20	847	1,100
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	142	405	610	20	847	1,100
DEPARTMENT OF LABOR, TOTAL	132	132	132	-	-	-
MANPOWER ADMINISTRATION	132	132	132	-	-	-
DEPARTMENT OF STATE, TOTAL	2,373	1,610	2,117	410	307	393
DEPARTMENTAL FUNDS	108	110	117	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FOREST SERVICE	2,730	2,973	3,085	-	-	-
NATIONAL AGRICULTURAL LIBRARY	3,619	3,980	3,834	388	208	227
STATISTICAL REPORTING SERVICE	10	10	11	-	-	-
DEPARTMENT OF COMMERCE, TOTAL	67,814	74,178	81,806	1,144	1,075	1,586
NATIONAL BUREAU OF STANDARDS	11,677	12,777	15,231	589	558	1,060
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1,853	1,979	2,216	542	504	513
OFFICE OF TELECOMMUNICATIONS	22	109	128	-	-	-
PATENT OFFICE	53,750	58,796	63,710	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION	512	517	521	13	13	13
DEPARTMENT OF DEFENSE, TOTAL	83,007	82,318	83,081	58,247	63,556	68,949
DEPARTMENT OF THE ARMY	58,716	56,900	56,975	14,471	14,300	14,300
DEPARTMENT OF THE NAVY	7,928	7,594	8,510	7,726	7,535	7,875
DEPARTMENT OF THE AIR FORCE	5,033	5,481	5,876	5,399	3,450	3,583
DEFENSE AGENCIES	11,330	12,343	11,720	30,641	38,261	43,181
DEPARTMENTWIDE FUNDS	-	-	-	10	10	10
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, TOTAL	37,517	33,208	36,270	35,081	39,778	50,614
FOOD AND DRUG ADMINISTRATION	2,358	2,704	3,587	3,066	3,553	6,221
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION	3,350	3,555	3,845	4,197	5,327	5,316
NATIONAL INSTITUTES OF HEALTH	23,565	25,483	27,190	17,778	20,733	24,637
OFFICE OF EDUCATION	7,941	1,114	1,290	10,040	10,165	14,440
SOCIAL SECURITY ADMINISTRATION	303	352	358	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL	13,752	13,644	14,739	502	590	598
BUREAU OF MINES	871	900	900	-	-	-
BUREAU OF OUTDOOR RECREATION	12	2	14	-	-	2
BUREAU OF RECLAMATION	523	446	494	10	11	13
BUREAU OF SPORT FISHERIES AND WILDLIFE	765	550	634	109	184	109
OFFICE OF LIBRARY SERVICES	931	886	1,095	-	-	75
GEOLOGICAL SURVEY	10,055	10,150	10,921	-	-	-
OFFICE OF COAL RESEARCH	7	17	21	3	5	6
OFFICE OF SALINE WATER	129	135	105	23	23	23
OFFICE OF WATER RESOURCES RESEARCH	459	558	555	357	367	370
DEPARTMENT OF JUSTICE, TOTAL	142	405	610	20	847	1,100
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION	142	405	610	20	847	1,100
DEPARTMENT OF LABOR, TOTAL	132	132	132	-	-	-
MANPOWER ADMINISTRATION	132	132	132	-	-	-
DEPARTMENT OF STATE, TOTAL	2,373	1,610	2,117	410	307	393
DEPARTMENTAL FUNDS	108	110	117	-	-	-
AGENCY FOR INTERNATIONAL DEVELOPMENT	2,265	1,500	2,000	410	307	393
DEPARTMENT OF TRANSPORTATION, TOTAL	1,930	2,471	2,572	2,279	5,133	6,035
FEDERAL AVIATION ADMINISTRATION	360	460	510	70	70	80
FEDERAL HIGHWAY ADMINISTRATION	360	400	400	1,080	1,285	1,295
FEDERAL RAILROAD ADMINISTRATION	-	-	-	123	675	400
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	210	210	260	247	1,240	1,680
OFFICE OF THE SECRETARY	600	1,001	1,002	516	903	1,304
UNITED STATES COAST GUARD	400	400	400	243	960	1,276
OTHER AGENCIES						
ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS	68	68	95	-	-	-
ATOMIC ENERGY COMMISSION	3,162	3,344	3,260	1,719	1,773	1,585
ENVIRONMENTAL PROTECTION AGENCY	1,816	1,948	2,155	1,375	1,389	1,583
FEDERAL COMMUNICATIONS COMMISSION	16	17	17	16	17	-
LIBRARY OF CONGRESS	24,975	30,459	31,049	20	-	-
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	12,570	13,411	13,766	14,409	13,842	14,427
NATIONAL SCIENCE FOUNDATION	2,416	1,062	1,230	11,637	10,881	10,350
OFFICE OF EMERGENCY PREPAREDNESS	3	3	3	5	5	-
OFFICE OF SCIENCE AND TECHNOLOGY	130	120	70	-	-	-
POSTAL SERVICE	32	-	-	29	-	-
SMITHSONIAN INSTITUTION	2,195	2,680	3,232	-	1,300	1,600
TENNESSEE VALLEY AUTHORITY	125	143	151	-	-	-
UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY	204	211	100	-	-	-
VETERANS ADMINISTRATION	6,060	6,160	6,360	40	40	40

TABLE D-4. FEDERAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY AND ACTIVITY, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	PUBLICATION AND DISTRIBUTION			DOCUMENTATION, REFERENCE, AND INFORMATION SERVICES				SYMPUSIA AND AUDIO/VISUAL MEDIA			R&D IN INFO. SCIENCE
		TOTAL	PUBLI- CATION & DISTRI- BUTION	SUPPORT OF PUBLI- CATIONS	TOTAL	LIBRARY AND REF- ERENCE	SPECIAL- IZED INFO. CENTERS	TRANS- LATIONS	TOTAL	SYM- POSIA	AUDIO/ VISUAL MEDIA & OTHER	
TOTAL, ALL AGENCIES...............	397,628	105,968	99,626	6,342	193,798	154,883	34,587	4,328	32,826	21,763	11,063	65,036
DEPARTMENTS												
DEPARTMENT OF AGRICULTURE, TOTAL..	10,256	3,291	2,649	642	4,682	4,680	-	2	1,880	1,782	98	403
AGRICULTURAL RESEARCH SERVICE.....	2,875	1,570	938	632	622	620	-	2	683	683	-	-
COOPERATIVE STATE RESEARCH SERVICE	184	11	11	-	-	-	-	-	172	172	-	1
ECONOMIC RESEARCH SERVICE.........	400	320	320	-	20	20	-	-	60	60	-	-
FARMER COOPERATIVE SERVICE........	50	50	50	-	-	-	-	-	-	-	-	-
FOREST SERVICE....................	2,730	1,333	1,323	10	435	435	-	-	951	856	95	11
NATIONAL AGRICULTURAL LIBRARY.....	4,007	-	-	-	3,605	3,605	-	-	11	11	-	391
STATISTICAL REPORTING SERVICE.....	10	7	7	-	-	-	-	-	3	-	3	-
DEPARTMENT OF COMMERCE, TOTAL.....	68,958	50,105	49,996	109	16,180	11,566	4,404	210	770	508	262	1,903
NATIONAL BUREAU OF STANDARDS......	12,266	4,527	4,445	82	6,015	1,739	4,254	22	645	390	255	1,079
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,395	1,444	1,417	27	780	650	103	27	83	76	7	88
OFFICE OF TELECOMMUNICATIONS......	22	-	-	-	-	-	-	-	-	-	-	22
PATENT OFFICE.....................	53,750	43,867	43,867	-	9,306	9,145	-	161	-	-	-	577
SOCIAL AND ECOMOMIC STATISTICS ADM	525	267	267	-	79	32	47	-	42	42	-	137
DEPARTMENT OF DEFENSE, TOTAL......	141,254	21,429	19,683	1,746	67,464	59,499	6,814	1,151	18,346	13,036	5,310	34,015
DEPARTMENT OF THE ARMY............	73,187	13,169	11,744	1,425	46,151	43,953	1,468	730	12,423	9,486	2,937	1,444
DEPARTMENT OF THE NAVY............	15,654	5,021	4,926	95	5,156	3,643	1,260	253	3,599	3,140	459	1,878
DEPARTMENT OF THE AIR FORCE.......	10,432	2,441	2,287	154	5,055	2,187	2,700	168	2,102	398	1,704	834
DEFENSE AGENCIES..................	41,971	798	726	72	11,092	9,716	1,376	-	222	12	210	29,859
DEPARTMENTWIDE FUNDS..............	10	-	-	-	10	-	10	-	-	-	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,598	6,118	4,211	1,907	46,082	29,890	14,896	1,296	4,563	2,905	1,658	15,835
FOOD AND DRUG ADMINISTRATION......	5,424	361	328	33	4,874	681	4,182	11	60	6	54	129
HEALTH SERV & MENTAL HEALTH ADM...	7,547	2,115	2,065	30	2,529	363	1,998	168	727	107	620	2,176
NATIONAL INSTITUTES OF HEALTH.....	41,343	3,247	1,403	1,844	24,102	20,029	2,956	1,117	3,552	2,761	791	10,442
OFFICE OF EDUCATION...............	17,981	123	123	-	14,577	8,817	5,760	-	193	-	193	3,088
SOCIAL SECURITY ADMINISTRATION....	303	272	272	-	-	-	-	-	31	31	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,254	7,252	7,249	3	5,248	4,250	956	42	650	647	3	1,104
BUREAU OF MINES...................	871	490	490	-	277	277	-	-	104	104	-	-
BUREAU OF OUTDOOR RECREATION......	12	10	7	3	2	2	-	-	-	-	-	-
BUREAU OF RECLAMATION.............	533	69	69	-	420	233	175	12	44	44	-	-
BUREAU OF SPORT FISH & WILDLIFE...	874	368	368	-	293	293	-	-	208	208	-	5
OFFICE OF LIBRARY SERVICES........	931	-	-	-	924	919	-	5	7	7	-	-
GEOLOGICAL SURVEY.................	10,055	6,249	6,249	-	2,426	1,710	691	25	281	281	-	1,099
OFFICE OF COAL RESEARCH...........	10	7	7	-	-	-	-	-	3	-	3	-
OFFICE OF SALINE WATER............	152	59	59	-	90	-	90	-	3	3	-	-
OFFICE OF WATER RESOURCES RESEARCH	816	-	-	-	816	816	-	-	-	-	-	-
DEPARTMENT OF JUSTICE, TOTAL......	162	140	140	-	8	8	-	-	14	-	14	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	162	140	140	-	8	8	-	-	14	-	14	-
DEPARTMENT OF LABOR, TOTAL........	132	92	92	-	40	40	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	92	92	-	40	40	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL..	2,783	410	-	410	2,373	2,373	-	-	-	-	-	-
DEPARTMENTAL FUNDS................	108	-	-	-	108	108						

AGRICULTURAL RESEARCH SERVICE.....	2,875	1,570	938	632	622	620	-	2	683	683	-	-
COOPERATIVE STATE RESEARCH SERVICE	184	11	11	-	-	-	-	-	172	172	-	1
ECONOMIC RESEARCH SERVICE..........	400	320	320	-	20	20	-	-	60	60	-	-
FARMER COOPERATIVE SERVICE.........	50	50	50	-	-	-	-	-	-	-	-	-
FOREST SERVICE.....................	2,730	1,333	1,323	10	435	435	-	-	951	856	95	11
NATIONAL AGRICULTURAL LIBRARY.....	4,007	-	-	-	3,605	3,605	-	-	11	11	-	391
STATISTICAL REPORTING SERVICE.....	10	7	7	-	-	-	-	-	3	-	3	-
DEPARTMENT OF COMMERCE, TOTAL.....	68,958	50,105	49,996	109	16,180	11,566	4,404	210	770	508	262	1,903
NATIONAL BUREAU OF STANDARDS......	12,266	4,527	4,445	82	6,015	1,739	4,254	22	645	390	255	1,079
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,395	1,444	1,417	27	780	650	103	27	83	76	7	88
OFFICE OF TELECOMMUNICATIONS......	22	-	-	-	-	-	-	-	-	-	-	22
PATENT OFFICE......................	53,750	43,867	43,867	-	9,306	9,145	-	161	-	-	-	577
SOCIAL AND ECONOMIC STATISTICS ADM	525	267	267	-	79	32	47	-	42	42	-	137
DEPARTMENT OF DEFENSE, TOTAL......	141,254	21,429	19,683	1,746	67,464	59,499	6,814	1,151	18,346	13,036	5,310	34,015
DEPARTMENT OF THE ARMY............	73,187	13,169	11,744	1,425	46,151	43,953	1,468	730	12,423	9,486	2,937	1,444
DEPARTMENT OF THE NAVY............	15,654	5,021	4,926	95	5,156	3,643	1,260	253	3,599	3,140	459	1,878
DEPARTMENT OF THE AIR FORCE.......	10,432	2,441	2,287	154	5,055	2,187	2,700	168	2,102	398	1,704	834
DEFENSE AGENCIES..................	41,971	798	726	72	11,092	9,716	1,376	-	222	12	210	29,859
DEPARTMENTWIDE FUNDS..............	10	-	-	-	10	-	10	-	-	-	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,598	6,118	4,211	1,907	46,082	29,890	14,896	1,296	4,563	2,905	1,658	15,835
FOOD AND DRUG ADMINISTRATION......	5,424	361	328	33	4,874	681	4,182	11	60	6	54	129
HEALTH SERV & MENTAL HEALTH ADM...	7,547	2,115	2,085	30	2,529	363	1,998	168	727	107	620	2,176
NATIONAL INSTITUTES OF HEALTH.....	41,343	3,247	1,403	1,844	24,102	20,029	2,956	1,117	3,552	2,761	791	10,442
OFFICE OF EDUCATION...............	17,981	123	123	-	14,577	8,817	5,760	-	193	-	193	3,088
SOCIAL SECURITY ADMINISTRATION....	303	272	272	-	-	-	-	-	31	31	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,254	7,252	7,249	3	5,248	4,250	956	42	650	647	3	1,104
BUREAU OF MINES....................	871	490	490	-	277	277	-	-	104	104	-	-
BUREAU OF OUTDOOR RECREATION......	12	10	7	3	2	2	-	-	-	-	-	-
BUREAU OF RECLAMATION..............	533	69	69	-	420	233	175	12	44	44	-	-
BUREAU OF SPORT FISH & WILDLIFE...	874	368	368	-	293	293	-	-	208	208	-	-
OFFICE OF LIBRARY SERVICES........	931	-	-	-	924	919	-	5	7	7	-	5
GEOLOGICAL SURVEY..................	10,055	6,249	6,249	-	2,426	1,710	691	25	281	281	-	1,099
OFFICE OF COAL RESEARCH............	10	7	7	-	-	-	-	-	3	-	3	-
OFFICE OF SALINE WATER.............	152	59	59	-	90	-	90	-	3	3	-	-
OFFICE OF WATER RESOURCES RESEARCH	816	-	-	-	816	816	-	-	-	-	-	-
DEPARTMENT OF JUSTICE, TOTAL......	162	140	140	-	8	8	-	-	14	-	14	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	162	140	140	-	8	8	-	-	14	-	14	-
DEPARTMENT OF LABOR, TOTAL........	132	92	92	-	40	40	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	92	92	-	40	40	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,783	410	-	410	2,373	2,373	-	-	-	-	-	-
DEPARTMENTAL FUNDS.................	108	-	-	-	108	108	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	2,675	410	-	410	2,265	2,265	-	-	-	-	-	-
DEPT. OF TRANSPORTATION, TOTAL....	4,209	240	238	2	3,826	635	3,191	-	65	60	5	78
FEDERAL AVIATION ADMINISTRATION...	430	50	50	-	350	350	-	-	30	25	5	-
FEDERAL HIGHWAY ADMINISTRATION....	1,440	155	155	-	1,250	175	1,075	-	35	35	-	-
FEDERAL RAILROAD ADMINISTRATION...	123	-	-	-	123	-	123	-	-	-	-	-
NAT'L HIGHWAY TRAFFIC SAFETY ADMIN	457	30	30	-	427	110	317	-	-	-	-	-
OFFICE OF THE SECRETARY...........	1,116	5	3	2	1,066	-	1,066	-	-	-	-	45
UNITED STATES COAST GUARD.........	643	-	-	-	610	-	610	-	-	-	-	33
OTHER AGENCIES												
ADVISORY COMM ON INTERGOV'L REL'S.	68	42	42	-	22	22	-	-	4	4	-	-
ATOMIC ENERGY COMMISSION..........	4,881	2,224	2,224	-	2,594	2,594	-	-	63	63	-	-
ENVIRONMENTAL PROTECTION AGENCY...	3,191	1,269	1,250	19	1,395	60	995	340	302	150	152	225
FEDERAL COMMUNICATIONS COMMISSION.	32	10	10	-	10	10	-	-	12	12	-	-
LIBRARY OF CONGRESS...............	24,995	-	-	-	22,541	22,541	-	-	-	-	-	2,454
NATIONAL AERONAUTICS & SPACE ADMIN	26,979	10,773	10,304	469	11,397	8,048	3,183	166	3,708	1,547	2,161	1,101
NATIONAL SCIENCE FOUNDATION.......	14,053	794	10	784	5,683	4,469	133	1,081	129	129	-	7,447
OFFICE OF EMERGENCY PREPAREDNESS..	8	-	-	-	3	3	-	-	5	5	-	-
OFFICE OF SCIENCE AND TECHNOLOGY..	130	40	25	15	70	45	15	10	10	5	5	10
POSTAL SERVICE.....................	61	-	-	-	-	-	-	-	-	-	-	61
SMITHSONIAN INSTITUTION...........	2,195	952	932	20	973	943	-	30	155	155	-	115
TENNESSEE VALLEY AUTHORITY........	125	-	-	-	125	125	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGCY	204	172	6	166	32	32	-	-	-	-	-	-
VETERANS ADMINISTRATION...........	6,100	615	565	50	3,050	3,050	-	-	2,150	755	1,395	285

TABLE D-5. FEDERAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY AND ACTIVITY, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	PUBLICATION AND DISTRIBUTION			DOCUMENTATION, REFERENCE, AND INFORMATION SERVICES				SYMPOSIA AND AUDIO/VISUAL MEDIA			R&D IN INFO. SCIENCE
		TOTAL	PUBLI-CATION & DISTRI-BUTION	SUPPORT OF PUBLI-CATIONS	TOTAL	LIBRARY AND REF-ERENCE	SPECIAL-IZED INFO. CENTERS	TRANS-LATIONS	TOTAL	SYM-POSIA	AUDIO/VISUAL MEDIA & OTHER	
TOTAL, ALL AGENCIES..............	419,020	113,709	106,433	7,276	198,306	153,963	40,171	4,172	33,432	22,325	11,107	73,573
DEPARTMENTS												
DEPARTMENT OF AGRICULTURE, TOTAL..	10,895	3,566	2,858	708	5,109	5,106	-	3	1,959	1,857	102	261
AGRICULTURAL RESEARCH SERVICE.....	3,087	1,717	1,021	696	691	688	-	3	679	679	-	-
COOPERATIVE STATE RESEARCH SERVICE	177	11	11	-	-	-	-	-	165	165	-	1
ECONOMIC RESEARCH SERVICE.........	410	330	330	-	20	20	-	-	60	60	-	-
FARMER COOPERATIVE SERVICE........	50	50	50	-	-	-	-	-	-	-	-	-
FOREST SERVICE....................	2,973	1,450	1,438	12	470	470	-	-	1,042	942	100	11
NATIONAL AGRICULTURAL LIBRARY.....	4,188	-	-	-	3,928	3,928	-	-	11	11	-	249
STATISTICAL REPORTING SERVICE.....	10	8	8	-	-	-	-	-	2	-	2	-
DEPARTMENT OF COMMERCE, TOTAL.....	75,253	55,695	55,581	114	16,665	11,949	4,504	212	841	580	261	2,052
NATIONAL BUREAU OF STANDARDS......	13,335	5,149	5,062	87	6,299	1,930	4,346	23	774	521	253	1,113
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,483	1,450	1,423	27	885	751	108	26	25	17	8	123
OFFICE OF TELECOMMUNICATIONS......	109	-	-	-	-	-	-	-	-	-	-	109
PATENT OFFICE.....................	58,796	48,813	48,813	-	9,399	9,236	-	163	-	-	-	584
SOCIAL AND ECOMOMIC STATISTICS ADM	530	283	283	-	82	32	50	-	42	42	-	123
DEPARTMENT OF DEFENSE, TOTAL......	145,874	21,784	19,865	1,919	65,213	58,171	5,984	1,058	17,945	12,706	5,239	40,932
DEPARTMENT OF THE ARMY............	71,200	13,100	11,600	1,500	44,700	42,500	1,600	600	12,000	9,200	2,800	1,400
DEPARTMENT OF THE NAVY............	15,129	5,074	4,975	99	4,811	3,825	701	285	3,600	3,140	460	1,644
DEPARTMENT OF THE AIR FORCE.......	8,931	2,614	2,430	184	2,870	2,334	363	173	2,152	354	1,798	1,295
DEFENSE AGENCIES..................	50,604	996	860	136	12,822	9,512	3,310	-	193	12	181	36,593
DEPARTMENTWIDE FUNDS..............	10	-	-	-	10	-	10	-	-	-	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,986	7,317	4,899	2,418	43,257	25,457	16,554	1,246	5,201	3,457	1,744	17,211
FOOD AND DRUG ADMINISTRATION......	6,257	397	360	37	5,648	747	4,888	13	66	6	60	146
HEALTH SERV & MENTAL HEALTH ADM...	8,882	2,233	2,213	20	3,132	355	2,658	119	916	201	715	2,601
NATIONAL INSTITUTES OF HEALTH.....	46,216	4,182	1,821	2,361	26,910	22,622	3,174	1,114	4,038	3,218	820	11,086
OFFICE OF EDUCATION...............	11,279	185	185	-	7,567	1,733	5,834	-	149	-	149	3,378
SOCIAL SECURITY ADMINISTRATION....	352	320	320	-	-	-	-	-	32	32	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,234	7,412	7,411	1	5,273	4,328	914	31	626	618	8	923
BUREAU OF MINES...................	900	505	505	-	289	289	-	-	106	106	-	-
BUREAU OF OUTDOOR RECREATION......	2	1	-	1	1	1	-	-	-	-	-	-
BUREAU OF RECLAMATION.............	457	66	66	-	347	181	160	6	44	44	-	-
BUREAU OF SPORT FISH & WILDLIFE...	734	325	325	-	296	296	-	-	113	113	-	-
OFFICE OF LIBRARY SERVICES........	886	-	-	-	882	877	-	5	4	4	-	-
GEOLOGICAL SURVEY.................	10,150	6,438	6,438	-	2,443	1,759	664	20	346	346	-	923
OFFICE OF COAL RESEARCH...........	22	17	17	-	-	-	-	-	5	-	5	-
OFFICE OF SALINE WATER............	158	60	60	-	90	-	90	-	8	5	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	-	-	-	925	925	-	-	-	-	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,252	360	310	50	875	50	825	-	17	-	17	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,252	360	310	50	875	50	825	-	17	-	17	-
DEPARTMENT OF LABOR, TOTAL........	132	92	92	-	40	40	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	92	92	-	40	40	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	1,917	307	-	307	1,610	1,610	-	-	-	-	-	-
DEPARTMENTAL FUNDS................	110	-	-	-	110	110	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	1,807	307	-	307	1,500	1,500	-	-	-	-	-	-

NATIONAL AGRICULTURAL LIBRARY.....	4,188	-	-	-	3,928	3,928	-	-	11	11	-	249
STATISTICAL REPORTING SERVICE.....	10	8	8	-	-	-	-	-	2	-	2	-
DEPARTMENT OF COMMERCE, TOTAL.....	75,253	55,695	55,581	114	16,665	11,949	4,504	212	841	580	261	2,052
NATIONAL BUREAU OF STANDARDS......	13,335	5,149	5,062	87	6,299	1,930	4,346	23	774	521	253	1,113
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,483	1,450	1,423	27	885	751	108	26	25	17	8	123
OFFICE OF TELECOMMUNICATIONS......	109	-	-	-	-	-	-	-	-	-	-	109
PATENT OFFICE.....................	58,796	48,813	48,813	-	9,399	9,236	-	163	-	-	-	584
SOCIAL AND ECOMOMIC STATISTICS ADM	530	283	283	-	82	32	50	-	42	42	-	123
DEPARTMENT OF DEFENSE, TOTAL......	145,874	21,784	19,865	1,919	65,213	58,171	5,984	1,058	17,945	12,706	5,239	40,932
DEPARTMENT OF THE ARMY............	71,200	13,100	11,600	1,500	44,700	42,500	1,600	600	12,000	9,200	2,800	1,400
DEPARTMENT OF THE NAVY............	15,129	5,074	4,975	99	4,811	3,825	701	285	3,600	3,140	460	1,644
DEPARTMENT OF THE AIR FORCE.......	8,931	2,614	2,430	184	2,870	2,334	363	173	2,152	354	1,798	1,295
DEFENSE AGENCIES..................	50,604	996	860	136	12,822	9,512	3,310	-	193	12	181	36,593
DEPARTMENTWIDE FUNDS..............	10	-	-	-	10	-	10	-	-	-	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,986	7,317	4,899	2,418	43,257	25,457	16,554	1,246	5,201	3,457	1,744	17,211
FOOD AND DRUG ADMINISTRATION......	6,257	397	360	37	5,648	747	4,888	13	66	6	60	146
HEALTH SERV & MENTAL HEALTH ADM...	8,882	2,233	2,213	20	3,132	355	2,658	119	916	201	715	2,601
NATIONAL INSTITUTES OF HEALTH.....	46,216	4,182	1,821	2,361	26,910	22,622	3,174	1,114	4,038	3,218	820	11,086
OFFICE OF EDUCATION...............	11,279	185	185	-	7,567	1,733	5,834	-	149	-	149	3,378
SOCIAL SECURITY ADMINISTRATION....	352	320	320	-	-	-	-	-	32	32	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,234	7,412	7,411	1	5,273	4,328	914	31	626	618	8	923
BUREAU OF MINES...................	900	505	505	-	289	289	-	-	106	106	-	-
BUREAU OF OUTDOOR RECREATION......	2	1	-	1	1	1	-	-	-	-	-	-
BUREAU OF RECLAMATION.............	457	66	66	-	347	181	160	6	44	44	-	-
BUREAU OF SPORT FISH & WILDLIFE...	734	325	325	-	296	296	-	-	113	113	-	-
OFFICE OF LIBRARY SERVICES........	886	-	-	-	882	877	-	5	4	4	-	-
GEOLOGICAL SURVEY.................	10,150	6,438	6,438	-	2,443	1,759	664	20	346	346	-	923
OFFICE OF COAL RESEARCH...........	22	17	17	-	-	-	-	-	5	-	5	-
OFFICE OF SALINE WATER............	158	60	60	-	90	-	90	-	8	5	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	-	-	-	925	925	-	-	-	-	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,252	360	310	50	875	50	825	-	17	-	17	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,252	360	310	50	875	50	825	-	17	-	17	-
DEPARTMENT OF LABOR, TOTAL........	132	92	92	-	40	40	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	92	92	-	40	40	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	1,917	307	-	307	1,610	1,610	-	-	-	-	-	-
DEPARTMENTAL FUNDS................	110	-	-	-	110	110	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	1,807	307	-	307	1,500	1,500	-	-	-	-	-	-
DEPT. OF TRANSPORTATION, TOTAL....	7,604	249	249	-	7,185	760	6,425	-	70	65	5	100
FEDERAL AVIATION ADMINISTRATION...	530	50	50	-	450	450	-	-	30	25	5	-
FEDERAL HIGHWAY ADMINISTRATION....	1,685	165	165	-	1,480	200	1,280	-	40	40	-	-
FEDERAL RAILROAD ADMINISTRATION...	675	-	-	-	675	-	675	-	-	-	-	-
NAT'L HIGHWAY TRAFFIC SAFETY ADMIN	1,450	30	30	-	1,420	110	1,310	-	-	-	-	-
OFFICE OF THE SECRETARY...........	1,904	4	4	-	1,800	-	1,800	-	-	-	-	100
UNITED STATES COAST GUARD.........	1,360	-	-	-	1,360	-	1,360	-	-	-	-	-
OTHER AGENCIES												
ADVISORY COMM ON INTERGOV'L REL'S.	68	48	48	-	15	15	-	-	5	5	-	-
ATOMIC ENERGY COMMISSION..........	5,117	2,216	2,216	-	2,761	2,761	-	-	140	140	-	-
ENVIRONMENTAL PROTECTION AGENCY...	3,337	1,315	1,281	34	1,352	80	915	357	410	175	235	260
FEDERAL COMMUNICATIONS COMMISSION.	34	10	10	-	10	10	-	-	14	14	-	-
LIBRARY OF CONGRESS...............	30,459	-	-	-	28,082	28,082	-	-	-	-	-	2,377
NATIONAL AERONAUTICS & SPACE ADMIN	27,253	10,440	9,937	503	12,105	8,077	3,863	165	3,519	1,490	2,029	1,189
NATIONAL SCIENCE FOUNDATION.......	11,943	990	13	977	2,981	1,744	177	1,060	174	132	42	7,798
OFFICE OF EMERGENCY PREPAREDNESS..	8	-	-	-	3	3	-	-	5	5	-	-
OFFICE OF SCIENCE AND TECHNOLOGY..	120	40	30	10	60	40	10	10	10	5	5	10
SMITHSONIAN INSTITUTION...........	3,990	1,086	1,061	25	2,434	2,404	-	30	310	310	-	150
TENNESSEE VALLEY AUTHORITY........	143	-	-	-	143	143	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGCY	211	167	7	160	33	33	-	-	1	1	-	10
VETERANS ADMINISTRATION...........	6,200	615	565	50	3,100	3,100	-	-	2,185	765	1,420	300

TABLE D-6. FEDERAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY AND ACTIVITY, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	PUBLICATION AND DISTRIBUTION			DOCUMENTATION, REFERENCE, AND INFORMATION SERVICES				SYMPOSIA AND AUDIO/VISUAL MEDIA			R&D IN INFO. SCIENCE
		TOTAL	PUBLI-CATION & DISTRI-BUTION	SUPPORT OF PUBLI-CATIONS	TOTAL	LIBRARY AND REF-ERENCE	SPECIAL-IZED INFO. CENTERS	TRANS-LATIONS	TOTAL	SYM-POSIA	AUDIO/VISUAL MEDIA & OTHER	
TOTAL, ALL AGENCIES...............	452,712	122,035	114,220	7,815	217,109	158,662	54,640	3,807	34,002	22,734	11,268	79,566
DEPARTMENTS												
DEPARTMENT OF AGRICULTURE, TOTAL..	11,037	3,737	2,966	771	5,025	5,021	-	4	2,002	1,897	105	273
AGRICULTURAL RESEARCH SERVICE.....	3,241	1,832	1,074	758	726	722	-	4	683	683	-	-
COOPERATIVE STATE RESEARCH SERVICE	177	11	11	-	-	-	-	-	165	165	-	1
ECONOMIC RESEARCH SERVICE.........	412	330	330	-	22	22	-	-	60	60	-	-
FARMER COOPERATIVE SERVICE........	50	50	50	-	-	-	-	-	-	-	-	-
FOREST SERVICE....................	3,085	1,505	1,492	13	488	488	-	-	1,081	978	103	11
NATIONAL AGRICULTURAL LIBRARY.....	4,061	-	-	-	3,789	3,789	-	-	11	11	-	261
STATISTICAL REPORTING SERVICE.....	11	9	9	-	-	-	-	-	2	-	2	-
DEPARTMENT OF COMMERCE, TOTAL.....	83,392	60,500	60,378	122	19,357	13,845	5,290	222	951	682	269	2,584
NATIONAL BUREAU OF STANDARDS......	16,291	6,443	6,351	92	7,377	2,270	5,079	28	888	625	263	1,583
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,729	1,568	1,538	30	992	804	160	28	21	15	6	148
OFFICE OF TELECOMMUNICATIONS......	128	-	-	-	-	-	-	-	-	-	-	128
PATENT OFFICE.....................	63,710	52,199	52,199	-	10,905	10,739	-	166	-	-	-	606
SOCIAL AND ECONOMIC STATISTICS ADM	534	290	290	-	83	32	51	-	42	42	-	119
DEPARTMENT OF DEFENSE, TOTAL......	152,030	22,640	20,440	2,200	65,752	57,770	7,026	956	17,805	12,672	5,133	45,833
DEPARTMENT OF THE ARMY............	71,275	13,700	12,000	1,700	44,275	42,000	1,775	500	11,700	9,200	2,500	1,600
DEPARTMENT OF THE NAVY............	16,385	5,150	5,050	100	5,400	4,120	1,000	280	3,550	3,100	450	2,285
DEPARTMENT OF THE AIR FORCE.......	9,459	2,728	2,532	196	3,300	2,433	691	176	2,293	360	1,933	1,138
DEFENSE AGENCIES..................	54,901	1,062	858	204	12,767	9,217	3,550	-	262	12	250	40,810
DEPARTMENTWIDE FUNDS..............	10	-	-	-	10	-	10	-	-	-	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	86,384	8,223	5,634	2,589	55,307	27,811	26,550	946	5,773	3,831	1,942	17,581
FOOD AND DRUG ADMINISTRATION......	9,308	445	403	42	9,126	837	8,275	14	74	7	67	163
HEALTH SERV & MENTAL HEALTH ADM...	9,161	2,420	2,400	20	3,390	360	2,910	120	1,000	185	815	2,351
NATIONAL INSTITUTES OF HEALTH.....	51,827	4,722	2,195	2,527	29,171	24,824	3,535	812	4,367	3,507	860	13,567
OFFICE OF EDUCATION...............	15,730	310	310	-	13,620	1,790	11,830	-	300	100	200	1,500
SOCIAL SECURITY ADMINISTRATION....	358	326	326	-	-	-	-	-	32	32	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	15,337	7,912	7,902	10	5,822	3,501	2,268	53	604	597	7	999
BUREAU OF MINES...................	900	505	505	-	289	289	-	-	106	106	-	-
BUREAU OF OUTDOOR RECREATION......	16	14	4	10	-	-	-	-	2	2	-	-
BUREAU OF RECLAMATION.............	507	66	66	-	397	203	170	24	44	44	-	-
BUREAU OF SPORT FISH & WILDLIFE...	743	312	312	-	306	306	-	-	120	120	-	5
OFFICE OF LIBRARY SERVICES........	1,170	-	-	-	1,163	1,158	-	5	7	7	-	-
GEOLOGICAL SURVEY.................	10,921	6,932	6,932	-	2,682	620	2,038	24	313	313	-	994
OFFICE OF COAL RESEARCH...........	27	23	23	-	-	-	-	-	4	-	4	-
OFFICE OF SALINE WATER............	128	60	60	-	60	-	60	-	8	5	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	-	-	-	925	925	-	-	-	-	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,710	620	520	100	1,060	60	1,000	-	30	-	30	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,710	620	520	100	1,060	60	1,000	-	30	-	30	-
DEPARTMENT OF LABOR, TOTAL........	132	92	92	-	40	40	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	92	92	-	40	40	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,510	393	-	393	2,117	2,117	-	-	-	-	-	-

AGRICULTURAL RESEARCH SERVICE.....	3,241	1,832	1,074	758	726	722	-	4	683	683	-	-
COOPERATIVE STATE RESEARCH SERVICE	177	11	11	-	-	-	-	-	165	165	-	1
ECONOMIC RESEARCH SERVICE.........	412	330	330	-	22	22	-	-	60	60	-	-
FARMER COOPERATIVE SERVICE........	50	50	50	-	-	-	-	-	-	-	-	-
FOREST SERVICE....................	3,085	1,505	1,492	13	488	488	-	-	1,081	978	103	11
NATIONAL AGRICULTURAL LIBRARY.....	4,061	-	-	-	3,789	3,789	-	-	11	11	-	261
STATISTICAL REPORTING SERVICE.....	11	9	9	-	-	-	-	-	2	-	2	-
DEPARTMENT OF COMMERCE, TOTAL.....	83,392	60,500	60,378	122	19,357	13,845	5,290	222	951	682	269	2,584
NATIONAL BUREAU OF STANDARDS......	16,291	6,443	6,351	92	7,377	2,270	5,079	28	888	625	263	1,583
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,729	1,568	1,538	30	992	804	160	28	21	15	6	148
OFFICE OF TELECOMMUNICATIONS......	128	-	-	-	-	-	-	-	-	-	-	128
PATENT OFFICE.....................	63,710	52,199	52,199	-	10,905	10,739	-	166	-	-	-	606
SOCIAL AND ECUMOMIC STATISTICS ADM	534	290	290	-	83	32	51	-	42	42	-	119
DEPARTMENT OF DEFENSE, TOTAL......	152,030	22,640	20,440	2,200	65,752	57,770	7,026	956	17,805	12,672	5,133	45,833
DEPARTMENT OF THE ARMY............	71,275	13,700	12,000	1,700	44,275	42,000	1,775	500	11,700	9,200	2,500	1,600
DEPARTMENT OF THE NAVY............	16,385	5,150	5,050	100	5,400	4,120	1,000	280	3,550	3,100	450	2,285
DEPARTMENT OF THE AIR FORCE.......	9,459	2,728	2,532	196	3,300	2,433	691	176	2,293	360	1,933	1,138
DEFENSE AGENCIES..................	54,901	1,062	858	204	12,767	9,217	3,550	-	262	12	250	40,810
DEPARTMENTWIDE FUNDS..............	10	-	-	-	10	-	10	-	-	-	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	86,884	8,223	5,634	2,589	55,307	27,811	26,550	946	5,773	3,831	1,942	17,581
FOOD AND DRUG ADMINISTRATION......	9,308	445	403	42	9,126	837	8,275	14	74	7	67	163
HEALTH SERV & MENTAL HEALTH ADM...	9,161	2,420	2,400	20	3,390	360	2,910	120	1,000	185	815	2,351
NATIONAL INSTITUTES OF HEALTH.....	51,827	4,722	2,195	2,527	29,171	24,824	3,535	812	4,367	3,507	860	13,567
OFFICE OF EDUCATION...............	15,730	310	310	-	13,620	1,790	11,830	-	300	100	200	1,500
SOCIAL SECURITY ADMINISTRATION....	358	326	326	-	-	-	-	-	32	32	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	15,337	7,912	7,902	10	5,822	3,501	2,268	53	604	597	7	999
BUREAU OF MINES...................	900	505	505	-	289	289	-	-	106	106	-	-
BUREAU OF OUTDOOR RECREATION......	16	14	4	10	-	-	-	-	2	2	-	-
BUREAU OF RECLAMATION.............	507	66	66	-	397	203	170	24	44	44	-	-
BUREAU OF SPORT FISH & WILDLIFE...	743	312	312	-	306	306	-	-	120	120	-	5
OFFICE OF LIBRARY SERVICES........	1,170	-	-	-	1,163	1,158	-	5	7	7	-	-
GEOLOGICAL SURVEY.................	10,921	6,932	6,932	-	2,682	620	2,038	24	313	313	-	994
OFFICE OF COAL RESEARCH...........	27	23	23	-	-	-	-	-	4	-	4	-
OFFICE OF SALINE WATER............	128	60	60	-	60	-	60	-	8	5	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	-	-	-	925	925	-	-	-	-	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,710	620	520	100	1,060	60	1,000	-	30	-	30	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,710	620	520	100	1,060	60	1,000	-	30	-	30	-
DEPARTMENT OF LABOR, TOTAL........	132	92	92	-	40	40	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	92	92	-	40	40	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,510	393	-	393	2,117	2,117	-	-	-	-	-	-
DEPARTMENTAL FUNDS................	117	-	-	-	117	117	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	2,393	393	-	393	2,000	2,000	-	-	-	-	-	-
DEPT. OF TRANSPORTATION, TOTAL....	8,607	351	351	-	8,086	810	7,276	-	70	65	5	100
FEDERAL AVIATION ADMINISTRATION...	590	60	60	-	500	500	-	-	30	25	5	-
FEDERAL HIGHWAY ADMINISTRATION....	1,695	185	185	-	1,470	200	1,270	-	40	40	-	-
FEDERAL RAILROAD ADMINISTRATION...	400	-	-	-	400	-	400	-	-	-	-	-
NAT'L HIGHWAY TRAFFIC SAFETY ADMIN	1,940	100	100	-	1,840	110	1,730	-	-	-	-	-
OFFICE OF THE SECRETARY...........	2,306	6	6	-	2,200	-	2,200	-	-	-	-	100
UNITED STATES COAST GUARD.........	1,676	-	-	-	1,676	-	1,676	-	-	-	-	-
OTHER AGENCIES												
ADVISORY COMM ON INTERGOV'L REL'S.	95	67	67	-	23	23	-	-	5	5	-	-
ATOMIC ENERGY COMMISSION..........	4,845	2,299	2,299	-	2,546	2,546	-	-	-	-	-	-
ENVIRONMENTAL PROTECTION AGENCY...	3,738	1,410	1,355	55	1,608	111	1,140	357	460	205	255	260
FEDERAL COMMUNICATIONS COMMISSION.	17	5	5	-	5	5	-	-	7	7	-	-
LIBRARY OF CONGRESS...............	31,049	-	-	-	28,614	28,614	-	-	-	-	-	2,435
NATIONAL AERONAUTICS & SPACE ADMIN	28,193	10,831	10,339	492	12,359	8,293	3,898	166	3,540	1,488	2,052	1,463
NATIONAL SCIENCE FOUNDATION.......	11,580	961	13	948	2,925	1,672	187	1,066	126	126	-	7,568
OFFICE OF EMERGENCY PREPAREDNESS..	3	-	-	-	3	3	-	-	-	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY..	70	20	15	5	40	30	5	5	5	5	-	5
SMITHSONIAN INSTITUTION...........	4,832	1,281	1,251	30	3,034	3,004	-	30	367	367	-	150
TENNESSEE VALLEY AUTHORITY........	151	-	-	-	151	151	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGCY	100	58	8	50	35	35	-	-	2	2	-	5
VETERANS ADMINISTRATION...........	6,400	635	585	50	3,200	3,200	-	-	2,255	785	1,470	310

TABLE D-7. FEDERAL INTRAMURAL AND EXTRAMURAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY AND ACTIVITY, FISCAL YEAR 1971

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRAMURAL					EXTRAMURAL				
		TOTAL	PUBLICATION AND DISTRIB.	DOC, REF, & INFO. SERVICE	SYMPOSIA & AUDIO/ VISUAL	R&D IN INFO. SCIENCE	TOTAL	PUBLICATION AND DISTRIB.	DOC, REF, & INFO. SERVICE	SYMPOSIA & AUDIO/ VISUAL	R&D IN INFO. SCIENCE
TOTAL, ALL AGENCIES..............	397,628	270,307	88,508	143,245	22,914	15,640	127,321	17,460	50,553	9,912	49,396
DEPARTMENTS											
DEPARTMENT OF AGRICULTURE, TOTAL..	10,256	9,868	3,291	4,502	1,880	195	388	-	180	-	208
AGRICULTURAL RESEARCH SERVICE.....	2,875	2,875	1,570	622	683	-	-	-	-	-	-
COOPERATIVE STATE RESEARCH SERVICE	184	184	11	-	172	1	-	-	-	-	-
ECONOMIC RESEARCH SERVICE..........	400	400	320	20	60	-	-	-	-	-	-
FARMER COOPERATIVE SERVICE.........	50	50	50	-	-	-	-	-	-	-	-
FOREST SERVICE.....................	2,730	2,730	1,333	435	951	11	-	-	-	-	-
NATIONAL AGRICULTURAL LIBRARY.....	4,007	3,619	-	3,425	11	183	388	-	180	-	208
STATISTICAL REPORTING SERVICE.....	10	10	7	-	3	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL.....	68,958	67,814	49,693	15,556	697	1,868	1,144	412	624	73	35
NATIONAL BUREAU OF STANDARDS......	12,266	11,677	4,527	5,426	645	1,079	589	-	589	-	-
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,395	1,853	1,032	745	23	53	542	412	35	60	35
OFFICE OF TELECOMMUNICATIONS......	22	22	-	-	-	22	-	-	-	-	-
PATENT OFFICE......................	53,750	53,750	43,867	9,306	-	577	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADM	525	512	267	79	29	137	13	-	-	13	-
DEPARTMENT OF DEFENSE, TOTAL......	141,254	83,007	14,873	52,104	13,150	2,880	58,247	6,556	15,360	5,196	31,135
DEPARTMENT OF THE ARMY............	73,187	58,716	10,544	37,024	9,984	1,164	14,471	2,625	9,127	2,439	280
DEPARTMENT OF THE NAVY............	15,654	7,928	2,301	3,454	1,533	640	7,726	2,720	1,702	2,066	1,238
DEPARTMENT OF THE AIR FORCE.......	10,432	5,033	1,553	2,032	1,431	17	5,399	888	3,023	671	817
DEFENSE AGENCIES..................	41,971	11,330	475	9,594	202	1,059	30,641	323	1,498	20	28,800
DEPARTMENTWIDE FUNDS..............	10	-	-	-	-	-	10	-	10	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,598	37,517	4,369	25,810	2,058	5,280	35,081	1,749	20,272	2,505	10,555
FOOD AND DRUG ADMINISTRATION......	5,424	2,358	260	2,016	60	22	3,066	101	2,858	-	107
HEALTH SERV & MENTAL HEALTH ADM...	7,547	3,350	1,728	1,592	30	-	4,197	387	937	697	2,176
NATIONAL INSTITUTES OF HEALTH.....	41,343	23,565	1,986	14,384	1,937	5,258	17,778	1,261	9,718	1,615	5,184
OFFICE OF EDUCATION...............	17,981	7,941	123	7,818	-	-	10,040	-	6,759	193	3,088
SOCIAL SECURITY ADMINISTRATION....	303	303	272	-	31	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,254	13,752	7,227	4,772	649	1,104	502	25	476	1	-
BUREAU OF MINES....................	871	871	490	277	104	-	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION......	12	12	10	2	-	-	-	-	-	-	-
BUREAU OF RECLAMATION..............	533	523	69	410	44	-	10	-	10	-	-
BUREAU OF SPORT FISH & WILDLIFE...	874	765	368	184	208	5	109	-	109	-	-
OFFICE OF LIBRARY SERVICES........	931	931	-	924	7	-	-	-	-	-	
GEOLOGICAL SURVEY..................	10,055	10,055	6,249	2,426	281	1,099	-	-	-	-	-
OFFICE OF COAL RESEARCH...........	10	7	5	-	2	-	3	2	-	1	-
OFFICE OF SALINE WATER............	152	129	36	90	3	-	23	23	-	-	-
OFFICE OF WATER RESOURCES RESEARCH	816	459	-	459	-	-	357	-	357	-	-
DEPARTMENT OF JUSTICE, TOTAL......	162	142	140	-	2	-	20	-	8	12	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	162	142	140	-	2	-	20	-	8	12	-
DEPARTMENT OF LABOR, TOTAL........	132	132	92	40	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	132	92	40	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,783	2,373	-	2,373	-	-	410	410	-	-	-

DEPARTMENT OF COMMERCE, TOTAL.....	68,958	67,814	49,693	15,556	697	1,868	1,144	412	624	73	35
NATIONAL BUREAU OF STANDARDS......	12,266	11,677	4,527	5,426	645	1,079	589	-	589	-	-
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,395	1,853	1,032	745	23	53	542	412	35	60	35
OFFICE OF TELECOMMUNICATIONS......	22	22	-	-	-	22	-	-	-	-	-
PATENT OFFICE.....................	53,750	53,750	43,867	9,306	-	577	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADM	525	512	267	79	29	137	13	-	-	13	-
DEPARTMENT OF DEFENSE, TOTAL......	141,254	83,007	14,873	52,104	13,150	2,880	58,247	6,556	15,360	5,196	31,135
DEPARTMENT OF THE ARMY............	73,187	58,716	10,544	37,024	9,984	1,164	14,471	2,625	9,127	2,439	280
DEPARTMENT OF THE NAVY............	15,654	7,928	2,301	3,454	1,533	640	7,726	2,720	1,702	2,066	1,238
DEPARTMENT OF THE AIR FORCE.......	10,432	5,033	1,553	2,032	1,431	17	5,399	888	3,023	571	817
DEFENSE AGENCIES..................	41,971	11,330	475	9,594	202	1,059	30,641	323	1,498	20	28,[illegible]00
DEPARTMENTWIDE FUNDS..............	10	-	-	-	-	-	10	-	10	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,598	37,517	4,369	25,810	2,058	5,280	35,081	1,749	20,272	2,505	10,555
FOOD AND DRUG ADMINISTRATION......	5,424	2,358	260	2,016	60	22	3,066	101	2,858	-	107
HEALTH SERV & MENTAL HEALTH ADM...	7,547	3,350	1,728	1,592	30	-	4,197	387	937	697	2,176
NATIONAL INSTITUTES OF HEALTH.....	41,343	23,565	1,986	14,384	1,937	5,258	17,778	1,261	9,718	1,615	5,184
OFFICE OF EDUCATION...............	17,981	7,941	123	7,818	-	-	10,040	-	6,759	193	3,088
SOCIAL SECURITY ADMINISTRATION....	303	303	272	-	31	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,254	13,752	7,227	4,772	649	1,104	502	25	476	1	-
BUREAU OF MINES...................	871	871	490	277	104	-	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION......	12	12	10	2	-	-	-	-	-	-	-
BUREAU OF RECLAMATION.............	533	523	69	410	44	-	10	-	10	-	-
BUREAU OF SPORT FISH & WILDLIFE...	874	765	368	184	208	5	109	-	109	-	-
OFFICE OF LIBRARY SERVICES........	931	931	-	924	7	-	-	-	-	-	-
GEOLOGICAL SURVEY.................	10,055	10,055	6,249	2,426	281	1,099	-	-	-	-	-
OFFICE OF COAL RESEARCH...........	10	7	5	-	2	-	3	2	-	1	-
OFFICE OF SALINE WATER............	152	129	36	90	3	-	23	23	-	-	-
OFFICE OF WATER RESOURCES RESEARCH	816	459	-	459	-	-	357	-	357	-	-
DEPARTMENT OF JUSTICE, TOTAL......	162	142	140	-	2	-	20	-	8	12	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	162	142	140	-	2	-	20	-	8	12	-
DEPARTMENT OF LABOR, TOTAL........	132	132	92	40	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	132	92	40	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,783	2,373	-	2,373	-	-	410	410	-	-	-
DEPARTMENTAL FUNDS................	108	108	-	108	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	2,675	2,265	-	2,265	-	-	410	410	-	-	-
DEPT. OF TRANSPORTATION, TOTAL....	4,209	1,930	105	1,760	65	-	2,279	135	2,066	-	78
FEDERAL AVIATION ADMINISTRATION...	430	360	30	300	30	-	70	20	50	-	-
FEDERAL HIGHWAY ADMINISTRATION....	1,440	360	75	250	35	-	1,080	80	1,000	-	-
FEDERAL RAILROAD ADMINISTRATION...	123	-	-	-	-	-	123	-	123	-	-
NAT'L HIGHWAY TRAFFIC SAFETY ADMIN	457	210	-	210	-	-	247	30	217	-	-
OFFICE OF THE SECRETARY...........	1,116	600	-	600	-	-	516	5	466	-	45
UNITED STATES COAST GUARD.........	643	400	-	400	-	-	243	-	210	-	33
OTHER AGENCIES											
ADVISORY COMM ON INTERGOV'L REL'S.	68	68	42	22	4	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION..........	4,881	3,162	1,620	1,542	-	-	1,719	604	1,052	63	-
ENVIRONMENTAL PROTECTION AGENCY...	3,191	1,816	965	583	163	105	1,375	304	812	139	120
FEDERAL COMMUNICATIONS COMMISSION.	32	16	5	5	6	-	16	5	5	6	-
LIBRARY OF CONGRESS...............	24,995	24,975	-	22,541	-	2,434	20	-	-	-	20
NATIONAL AERONAUTICS & SPACE ADMIN	26,979	12,570	4,215	5,479	1,943	933	14,409	6,558	5,918	1,765	168
NATIONAL SCIENCE FOUNDATION.......	14,053	2,416	107	1,903	7	399	11,637	687	3,780	122	7,048
OFFICE OF EMERGENCY PREPAREDNESS..	8	3	-	3	-	-	5	-	-	5	-
OFFICE OF SCIENCE AND TECHNOLOGY..	130	130	40	70	10	10	-	-	-	-	-
POSTAL SERVICE....................	61	32	-	-	-	32	29	-	-	-	29
SMITHSONIAN INSTITUTION...........	2,195	2,195	952	973	155	115	-	-	-	-	-
TENNESSEE VALLEY AUTHORITY........	125	125	-	125	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGCY	204	204	172	32	-	-	-	-	-	-	-
VETERANS ADMINISTRATION...........	6,100	6,060	600	3,050	2,125	285	40	15	-	25	-

TABLE D-8. FEDERAL INTRAMURAL AND EXTRAMURAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY AND ACTIVITY, FISCAL YEAR 1972 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRAMURAL					EXTRAMURAL				
		TOTAL	PUBLICATION AND DISTRIB.	DOC,REF, & INFO. SERVICE	SYMPOSIA & AUDIO/ VISUAL	R&D IN INFO. SCIENCE	TOTAL	PUBLICATION AND DISTRIB.	DOC,REF, & INFO. SERVICE	SYMPOSIA & AUDIO/ VISUAL	R&D IN INFO. SCIENCE
TOTAL, ALL AGENCIES..............	419,020	278,279	95,619	142,900	22,804	16,956	140,741	18,090	55,406	10,628	56,617
DEPARTMENTS											
DEPARTMENT OF AGRICULTURE, TOTAL..	10,895	10,687	3,566	4,963	1,959	199	208	-	146	-	62
AGRICULTURAL RESEARCH SERVICE.....	3,087	3,087	1,717	691	679	-	-	-	-	-	-
COOPERATIVE STATE RESEARCH SERVICE	177	177	11	-	165	1	-	-	-	-	-
ECONOMIC RESEARCH SERVICE.........	410	410	330	20	60	-	-	-	-	-	-
FARMER COOPERATIVE SERVICE........	50	50	50	-	-	-	-	-	-	-	-
FOREST SERVICE....................	2,973	2,973	1,450	470	1,042	11	-	-	-	-	-
NATIONAL AGRICULTURAL LIBRARY.....	4,188	3,980	-	3,782	11	187	208	-	146	-	62
STATISTICAL REPORTING SERVICE.....	10	10	8	-	2	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL.....	75,253	74,178	55,303	16,068	828	1,979	1,075	392	597	13	73
NATIONAL BUREAU OF STANDARDS......	13,335	12,777	5,149	5,741	774	1,113	558	-	558	-	-
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,483	1,979	1,058	846	25	50	504	392	39	-	73
OFFICE OF TELECOMMUNICATIONS......	109	109	-	-	-	109	-	-	-	-	-
PATENT OFFICE.....................	58,796	58,796	48,813	9,399	-	584	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADM	530	517	283	82	29	123	13	-	-	13	-
DEPARTMENT OF DEFENSE, TOTAL......	145,874	82,318	14,922	51,010	12,639	3,747	63,556	6,862	14,203	5,306	37,185
DEPARTMENT OF THE ARMY............	71,200	56,900	10,400	35,800	9,500	1,200	14,300	2,700	8,900	2,500	200
DEPARTMENT OF THE NAVY............	15,129	7,594	2,309	3,376	1,555	354	7,535	2,765	1,435	2,045	1,290
DEPARTMENT OF THE AIR FORCE.......	8,931	5,481	1,701	2,097	1,458	225	3,450	913	773	694	1,070
DEFENSE AGENCIES..................	50,604	12,343	512	9,737	126	1,968	38,261	484	3,085	67	34,625
DEPARTMENTWIDE FUNDS..............	10	-	-	-	-	-	10	-	10	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,986	33,208	4,877	20,552	2,152	5,627	39,778	2,440	22,705	3,049	11,584
FOOD AND DRUG ADMINISTRATION......	6,257	2,704	286	2,326	66	26	3,553	111	3,322	-	120
HEALTH SERV & MENTAL HEALTH ADM...	8,832	3,555	1,579	1,910	66	-	5,327	654	1,222	850	2,601
NATIONAL INSTITUTES OF HEALTH.....	46,216	25,483	2,507	15,387	1,988	5,601	20,733	1,675	11,523	2,050	5,485
OFFICE OF EDUCATION...............	11,279	1,114	185	929	-	-	10,165	-	6,638	149	3,378
SOCIAL SECURITY ADMINISTRATION....	352	352	320	-	32	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,234	13,644	7,314	4,786	621	923	590	98	487	5	-
BUREAU OF MINES...................	900	900	505	289	106	-	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION......	2	2	1	1	-	-	-	-	-	-	-
BUREAU OF RECLAMATION.............	457	446	66	336	44	-	11	-	11	-	-
BUREAU OF SPORT FISH & WILDLIFE...	734	550	250	187	113	-	184	75	109	-	-
OFFICE OF LIBRARY SERVICES........	886	886	-	882	4	-	-	-	-	-	-
GEOLOGICAL SURVEY.................	10,150	10,150	6,438	2,443	346	923	-	-	-	-	-
OFFICE OF COAL RESEARCH...........	22	17	14	-	3	-	5	3	-	2	-
OFFICE OF SALINE WATER............	158	135	40	90	5	-	23	20	-	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	558	-	558	-	-	367	-	367	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,252	405	350	50	5	-	847	10	825	12	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,252	405	350	50	5	-	847	10	825	12	-
DEPARTMENT OF LABOR, TOTAL........	132	132	92	40	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	132	92	40	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	1,917	1,610	-	1,610	-	-	307	307	-	-	-
DEPARTMENTAL FUNDS................	110	110	-	110	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	1,807	1,500	-	1,500	-	-	307	307	-	-	-

STATISTICAL REPORTING SERVICE.....	10	10	8	-	2	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL.....	75,253	74,178	55,303	16,068	828	1,979	1,075	392	597	13	73
NATIONAL BUREAU OF STANDARDS......	13,335	12,777	5,149	5,741	774	1,113	558	-	558	-	-
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,483	1,979	1,058	846	25	50	504	392	39	-	73
OFFICE OF TELECOMMUNICATIONS......	109	109	-	-	-	109	-	-	-	-	-
PATENT OFFICE......................	58,796	58,796	48,813	9,399	-	584	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADM	530	517	283	82	29	123	13	-	-	13	-
DEPARTMENT OF DEFENSE, TOTAL......	145,874	82,318	14,922	51,010	12,639	3,747	63,556	6,862	14,203	5,306	37,185
DEPARTMENT OF THE ARMY............	71,200	56,900	10,400	35,800	9,500	1,200	14,300	2,700	8,900	2,500	200
DEPARTMENT OF THE NAVY............	15,129	7,594	2,309	3,376	1,555	354	7,535	2,765	1,435	2,045	1,290
DEPARTMENT OF THE AIR FORCE.......	8,931	5,481	1,701	2,097	1,458	225	3,450	913	773	694	1,070
DEFENSE AGENCIES..................	50,604	12,343	512	9,737	126	1,968	38,261	484	3,085	67	34,625
DEPARTMENTWIDE FUNDS..............	10	-	-	-	-	-	10	-	10	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	72,986	33,208	4,877	20,552	2,152	5,627	39,778	2,440	22,705	3,049	11,584
FOOD AND DRUG ADMINISTRATION......	6,257	2,704	286	2,326	66	26	3,553	111	3,322	-	120
HEALTH SERV & MENTAL HEALTH ADM...	8,892	3,555	1,579	1,910	66	-	5,327	654	1,222	850	2,601
NATIONAL INSTITUTES OF HEALTH.....	46,216	25,483	2,507	15,387	1,988	5,601	20,733	1,675	11,523	2,050	5,485
OFFICE OF EDUCATION...............	11,279	1,114	185	929	-	-	10,165	-	6,638	149	3,378
SOCIAL SECURITY ADMINISTRATION....	352	352	320	-	32	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	14,234	13,644	7,314	4,786	621	923	590	98	487	5	-
BUREAU OF MINES....................	900	900	505	289	106	-	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION......	2	2	1	1	-	-	-	-	-	-	-
BUREAU OF RECLAMATION.............	457	446	66	336	44	-	11	-	11	-	-
BUREAU OF SPORT FISH & WILDLIFE...	734	550	250	187	113	-	184	75	109	-	-
OFFICE OF LIBRARY SERVICES........	886	886	-	882	4	-	-	-	-	-	-
GEOLOGICAL SURVEY.................	10,150	10,150	6,438	2,443	346	923	-	-	-	-	-
OFFICE OF COAL RESEARCH...........	22	17	14	-	3	-	5	3	-	2	-
OFFICE OF SALINE WATER............	158	135	40	90	5	-	23	20	-	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	558	-	558	-	-	367	-	367	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,252	405	350	50	5	-	847	10	825	12	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,252	405	350	50	5	-	847	10	825	12	-
DEPARTMENT OF LABOR, TOTAL........	132	132	92	40	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	132	92	40	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	1,917	1,610	-	1,610	-	-	307	307	-	-	-
DEPARTMENTAL FUNDS................	110	110	-	110	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	1,807	1,500	-	1,500	-	-	307	307	-	-	-
DEPT. OF TRANSPORTATION, TOTAL....	7,604	2,471	111	2,290	70	-	5,133	138	4,895	-	100
FEDERAL AVIATION ADMINISTRATION...	530	460	30	400	30	-	70	20	50	-	-
FEDERAL HIGHWAY ADMINISTRATION....	1,685	400	80	280	40	-	1,285	85	1,200	-	-
FEDERAL RAILROAD ADMINISTRATION...	675	-	-	-	-	-	675	-	675	-	-
NAT'L HIGHWAY TRAFFIC SAFETY ADMIN	1,450	210	-	210	-	-	1,240	30	1,210	-	-
OFFICE OF THE SECRETARY...........	1,904	1,001	1	1,000	-	-	903	3	800	-	100
UNITED STATES COAST GUARD.........	1,360	400	-	400	-	-	960	-	960	-	-
OTHER AGENCIES											
ADVISORY COMM ON INTERGOV'L REL'S.	68	68	48	15	5	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION..........	5,117	3,344	1,708	1,636	-	-	1,773	508	1,125	140	-
ENVIRONMENTAL PROTECTION AGENCY...	3,337	1,948	998	630	180	140	1,389	317	722	230	120
FEDERAL COMMUNICATIONS COMMISSION.	34	17	5	5	7	-	17	5	5	7	-
LIBRARY OF CONGRESS...............	30,459	30,459	-	28,082	-	2,377	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	27,253	13,411	4,298	6,229	1,848	1,036	13,842	6,142	5,876	1,671	153
NATIONAL SCIENCE FOUNDATION.......	11,943	1,062	134	461	9	458	10,881	856	2,520	165	7,340
OFFICE OF EMERGENCY PREPAREDNESS..	8	3	-	3	-	-	5	-	-	5	-
OFFICE OF SCIENCE AND TECHNOLOGY..	120	120	40	60	10	10	-	-	-	-	-
SMITHSONIAN INSTITUTION...........	3,980	2,680	1,086	1,134	310	150	1,300	-	1,300	-	-
TENNESSEE VALLEY AUTHORITY........	143	143	-	143	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGCY	211	211	167	33	1	10	-	-	-	-	-
VETERANS ADMINISTRATION...........	6,200	6,160	600	3,100	2,160	300	40	15	-	25	-

TABLE D-9. FEDERAL INTRAMURAL AND EXTRAMURAL OBLIGATIONS FOR SCIENTIFIC AND TECHNICAL INFORMATION, BY AGENCY AND ACTIVITY, FISCAL YEAR 1973 (ESTIMATED)

(THOUSANDS OF DOLLARS)

AGENCY AND SUBDIVISION	TOTAL	INTRAMURAL					EXTRAMURAL				
		TOTAL	PUBLICA-TION AND DISTRIB.	DOC.REF, & INFO. SERVICE	SYMPOSIA & AUDIO/VISUAL	R&D IN INFO. SCIENCE	TOTAL	PUBLICA-TION AND DISTRIB.	DOC.REF, & INFO. SERVICE	SYMPOSIA & AUDIO/VISUAL	R&D IN INFO. SCIENCE
TOTAL, ALL AGENCIES..............	452,712	293,625	101,945	150,258	22,964	18,458	159,087	20,090	66,851	11,033	61,108
DEPARTMENTS											
DEPARTMENT OF AGRICULTURE, TOTAL..	11,037	10,810	3,737	4,898	2,002	173	227	-	127	-	100
AGRICULTURAL RESEARCH SERVICE.....	3,241	3,241	1,832	726	683	-	-	-	-	-	-
COOPERATIVE STATE RESEARCH SERVICE	177	177	11	-	165	1	-	-	-	-	-
ECONOMIC RESEARCH SERVICE.........	412	412	330	22	60	-	-	-	-	-	-
FARMER COOPERATIVE SERVICE........	50	50	50	-	-	-	-	-	-	-	-
FOREST SERVICE....................	3,085	3,085	1,505	488	1,081	11	-	-	-	-	-
NATIONAL AGRICULTURAL LIBRARY.....	4,061	3,834	-	3,662	11	161	227	-	127	-	100
STATISTICAL REPORTING SERVICE.....	11	11	9	-	2	-	-	-	-	-	-
DEPARTMENT OF COMMERCE, TOTAL.....	83,392	81,806	60,115	18,257	938	2,496	1,586	385	1,100	13	88
NATIONAL BUREAU OF STANDARDS......	16,291	15,231	6,443	6,317	888	1,583	1,060	-	1,060	-	-
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,729	2,216	1,183	952	21	60	513	385	40	-	88
OFFICE OF TELECOMMUNICATIONS......	128	128	-	-	-	128	-	-	-	-	-
PATENT OFFICE.....................	63,710	63,710	52,199	10,905	-	606	-	-	-	-	-
SOCIAL AND ECONOMIC STATISTICS ADM	534	521	290	83	29	119	13	-	-	13	-
DEPARTMENT OF DEFENSE, TOTAL......	152,030	83,081	14,808	51,820	12,417	4,036	68,949	7,832	13,932	5,388	41,797
DEPARTMENT OF THE ARMY............	71,275	56,975	10,200	36,275	9,200	1,300	14,300	3,500	8,000	2,500	300
DEPARTMENT OF THE NAVY............	16,385	8,510	2,310	3,700	1,500	1,000	7,875	2,840	1,700	2,050	1,285
DEPARTMENT OF THE AIR FORCE.......	9,459	5,876	1,782	2,253	1,585	256	3,583	946	1,047	708	882
DEFENSE AGENCIES..................	54,901	11,720	516	9,592	132	1,480	43,181	546	3,175	130	39,330
DEPARTMENTWIDE FUNDS..............	10	-	-	-	-	-	10	-	10	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	86,884	36,270	5,341	22,913	2,267	5,749	50,614	2,882	32,394	3,506	11,832
FOOD AND DRUG ADMINISTRATION......	9,808	3,587	322	3,162	74	29	6,221	123	5,964	-	134
HEALTH SERV & MENTAL HEALTH ADM...	9,161	3,845	1,610	2,165	70	-	5,316	810	1,225	930	2,351
NATIONAL INSTITUTES OF HEALTH.....	51,827	27,190	2,773	16,606	2,091	5,720	24,637	1,949	12,565	2,276	7,847
OFFICE OF EDUCATION...............	15,730	1,290	310	980	-	-	14,440	-	12,640	300	1,500
SOCIAL SECURITY ADMINISTRATION....	358	358	326	-	32	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	15,337	14,739	7,888	5,255	597	999	598	24	567	7	-
BUREAU OF MINES...................	900	900	505	289	106	-	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION......	16	14	14	-	-	-	2	-	-	2	-
BUREAU OF RECLAMATION.............	507	494	66	384	44	-	13	-	13	-	-
BUREAU OF SPORT FISH & WILDLIFE...	743	634	312	197	120	5	109	-	109	-	-
OFFICE OF LIBRARY SERVICES........	1,170	1,095	-	1,088	7	-	75	-	75	-	-
GEOLOGICAL SURVEY.................	10,921	10,921	6,932	2,682	313	994	-	-	-	-	-
OFFICE OF COAL RESEARCH...........	27	21	19	-	2	-	6	4	-	2	-
OFFICE OF SALINE WATER............	128	105	40	60	5	-	23	20	-	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	555	-	555	-	-	370	-	370	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,710	610	600	-	10	-	1,100	20	1,060	20	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,710	610	600	-	10	-	1,100	20	1,060	20	-
DEPARTMENT OF LABOR, TOTAL........	13[illegible]	132	92	40	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	132	92	40	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,510	2,117	-	2,117	-	-	393	393	-	-	-

U. S. GOV

DEPARTMENT OF COMMERCE, TOTAL.....	83,392	81,806	60,115	18,257	938	2,496	1,586	385	1,100	13	88
NATIONAL BUREAU OF STANDARDS......	16,291	15,231	6,443	6,317	888	1,583	1,060	-	1,060	-	-
NATIONAL OCEANIC AND ATMOS. ADMIN.	2,729	2,216	1,183	952	21	60	513	385	40	-	88
OFFICE OF TELECOMMUNICATIONS......	128	128	-	-	-	128	-	-	-	-	-
PATENT OFFICE.....................	63,710	63,710	52,199	10,905	-	606	-	-	-	-	-
SOCIAL AND ECOMOMIC STATISTICS ADM	534	521	290	83	29	119	13	-	-	13	-
DEPARTMENT OF DEFENSE, TOTAL......	152,030	83,081	14,808	51,820	12,417	4,036	68,949	7,832	13,932	5,388	41,797
DEPARTMENT OF THE ARMY............	71,275	56,975	10,200	36,275	9,200	1,300	14,300	3,500	8,000	2,500	300
DEPARTMENT OF THE NAVY............	16,385	8,510	2,310	3,700	1,500	1,000	7,875	2,840	1,700	2,050	1,285
DEPARTMENT OF THE AIR FORCE.......	9,459	5,876	1,782	2,253	1,585	256	3,583	946	1,047	708	882
DEFENSE AGENCIES..................	54,901	11,720	516	9,592	132	1,480	43,181	546	3,175	130	39,330
DEPARTMENTWIDE FUNDS..............	10	-	-	-	-	-	10	-	10	-	-
DEPT HEALTH, ED, & WELFARE, TOTAL.	86,884	36,270	5,341	22,913	2,267	5,749	50,614	2,882	32,394	3,506	11,832
FOOD AND DRUG ADMINISTRATION......	9,808	3,587	322	3,162	74	29	6,221	123	5,964	-	134
HEALTH SERV & MENTAL HEALTH ADM...	9,151	3,845	1,610	2,165	70	-	5,316	810	1,225	930	2,351
NATIONAL INSTITUTES OF HEALTH.....	51,827	27,190	2,773	16,606	2,091	5,720	24,637	1,949	12,565	2,276	7,847
OFFICE OF EDUCATION...............	15,730	1,290	310	980	-	-	14,440	-	12,640	300	1,500
SOCIAL SECURITY ADMINISTRATION....	358	358	326	-	32	-	-	-	-	-	-
DEPARTMENT OF THE INTERIOR, TOTAL.	15,337	14,739	7,888	5,255	597	999	598	24	567	7	-
BUREAU OF MINES...................	900	900	505	289	106	-	-	-	-	-	-
BUREAU OF OUTDOOR RECREATION......	16	14	14	-	-	-	2	-	-	2	-
BUREAU OF RECLAMATION.............	507	494	66	384	44	-	13	-	13	-	-
BUREAU OF SPORT FISH & WILDLIFE...	743	634	312	197	120	5	109	-	109	-	-
OFFICE OF LIBRARY SERVICES........	1,170	1,095	-	1,088	7	-	75	-	75	-	-
GEOLOGICAL SURVEY.................	10,921	10,921	6,932	2,682	313	994	-	-	-	-	-
OFFICE OF COAL RESEARCH...........	27	21	19	-	2	-	6	4	-	2	-
OFFICE OF SALINE WATER............	128	105	40	60	5	-	23	20	-	3	-
OFFICE OF WATER RESOURCES RESEARCH	925	555	-	555	-	-	370	-	370	-	-
DEPARTMENT OF JUSTICE, TOTAL......	1,710	610	600	-	10	-	1,100	20	1,060	20	-
LAW ENFORCEMENT ASSISTANCE ADMIN..	1,710	610	600	-	10	-	1,100	20	1,060	20	-
DEPARTMENT OF LABOR, TOTAL........	132	132	92	40	-	-	-	-	-	-	-
MANPOWER ADMINISTRATION...........	132	132	92	40	-	-	-	-	-	-	-
DEPARTMENT OF STATE, TOTAL........	2,510	2,117	-	2,117	-	-	393	393	-	-	-
DEPARTMENTAL FUNDS................	117	117	-	117	-	-	-	-	-	-	-
AGENCY FOR INTERNATIONAL DEVELOP..	2,393	2,000	-	2,000	-	-	393	393	-	-	-
DEPT. OF TRANSPORTATION, TOTAL....	8,607	2,572	172	2,330	70	-	6,035	179	5,756	-	100
FEDERAL AVIATION ADMINISTRATION...	590	510	30	450	30	-	80	30	50	-	-
FEDERAL HIGHWAY ADMINISTRATION....	1,695	400	90	270	40	-	1,295	95	1,200	-	-
FEDERAL RAILROAD ADMINISTRATION...	400	-	-	-	-	-	400	-	400	-	-
NAT'L HIGHWAY TRAFFIC SAFETY ADMIN	1,940	260	50	210	-	-	1,680	50	1,630	-	-
OFFICE OF THE SECRETARY...........	2,306	1,002	2	1,000	-	-	1,304	4	1,200	-	100
UNITED STATES COAST GUARD.........	1,676	400	-	400	-	-	1,276	-	1,276	-	-
OTHER AGENCIES											
ADVISORY COMM ON INTERGOV'L REL'S.	95	95	67	23	5	-	-	-	-	-	-
ATOMIC ENERGY COMMISSION..........	4,845	3,260	1,655	1,605	-	-	1,585	644	941	-	-
ENVIRONMENTAL PROTECTION AGENCY...	3,738	2,155	1,060	775	180	140	1,583	350	833	280	120
FEDERAL COMMUNICATIONS COMMISSION.	17	17	5	5	7	-	-	-	-	-	-
LIBRARY OF CONGRESS...............	31,049	31,049	-	28,614	-	2,435	-	-	-	-	-
NATIONAL AERONAUTICS & SPACE ADMIN	28,193	13,766	4,286	6,288	1,860	1,332	14,427	6,545	6,071	1,680	131
NATIONAL SCIENCE FOUNDATION.......	11,580	1,230	140	455	7	628	10,350	821	2,470	119	6,940
OFFICE OF EMERGENCY PREPAREDNESS..	3	3	-	3	-	-	-	-	-	-	-
OFFICE OF SCIENCE AND TECHNOLOGY..	70	70	20	40	5	5	-	-	-	-	-
SMITHSONIAN INSTITUTION...........	4,832	3,232	1,281	1,434	367	150	1,600	-	1,600	-	-
TENNESSEE VALLEY AUTHORITY........	151	151	-	151	-	-	-	-	-	-	-
US ARMS CONTROL & DISARMAMENT AGCY	100	100	58	35	2	5	-	-	-	-	-
VETERANS ADMINISTRATION...........	6,400	6,360	620	3,200	2,230	310	40	15	-	25	-

U. S. GOVERNMENT PRINTING OFFICE : 1972 O - 72 - 489-778

FILMED FROM BEST AVAILABLE COPY

Other Science Resources Publications

Title	NSF No.	Price
Scientists, Engineers, and Physicians From Abroad, Trends Through Fiscal Year 1970	72-312	In Press
Science Resources Studies Highlights, "Changes in Graduate Programs in Science and Engineering, 1970-72 and 1972-74"	72-311	- - - - -
A Price Index for Deflation of Academic R&D Expenditures	72-310	$0.25
Science Resources Studies Highlights, "First-Year, Full-Time Graduate Science Enrollment Continues to Decline"	72-308	- - - - -
Unemployment Rates and Employment Characteristics for Scientists and Engineers, 1971	72-307	$1.75
Science Resources Studies Highlights, "Total Scientific and Technical Personnel in Industry Remains Level, R&D Personnel Lower in 1970"	72-306	- - - - -
Scientific Human Resources: Profiles and Issues	72-304	$0.25
Papers and Proceedings of a Colloquium of Research and Development and Economic Growth/Productivity	72-303	$0.75

Title
Federal Funds for Academic Science, Fiscal Year
Science Resources Studies Highlights, "Federal S and Health Personnel in 1970"
American Science Manpower, 1970
Science Resources Studies Highlights, "Undergr in Science and Engineering"
Science Resources Studies Highlights, "Enro Science and Mathematics in Public Secondar to 1969-70"
1969 and 1980 Science and Engineering Doc Utilization
Reviews of Data on Science Resources, No. 20 uate Science and Engineering, 1960-70"
Science Resources Studies Highlights, "Second Teachers (Experience and Employment)

FILMED FROM BEST AVAILABLE COPY

es Publications

	NSF No.	Price
road, Trends Through	72-312	In Press
ges in Graduate Pro- 70-72 and 1972-74"	72-311	- - - - -
R&D Expenditures	72-310	$0.25
Year, Full-Time Grad- ine"	72-308	- - - - -
racteristics for Scien-	72-307	$1.75
Scientific and Techni- &D Personnel Lower	72-306	- - - - -
s	72-304	$0.25
esearch and Develop-	72-303	$0.75

Title	NSF No.	Price
Federal Funds for Academic Science, Fiscal Year 1970	72-301	$0.70
Science Resources Studies Highlights, "Federal Scientific, Technical and Health Personnel in 1970"	71-47	- - - - -
American Science Manpower, 1970	71-45	$2.00
Science Resources Studies Highlights, "Undergraduate Enrollments in Science and Engineering"	71-42	- - - - -
Science Resources Studies Highlights, "Enrollment Increase in Science and Mathematics in Public Secondary Schools, 1948-49 to 1969-70"	71-30	- - - - -
1969 and 1980 Science and Engineering Doctorate Supply and Utilization	71-20	$0.50
Reviews of Data on Science Resources, No. 20, "Trends in Graduate Science and Engineering, 1960-70"	71-15	$0.15
Science Resources Studies Highlights, "Secondary School Science Teachers (Experience and Employment)	71-12	- - - - -